

★

UMASS/AMHERST

★



312066 0270 7513 8



Lacks 1987



Digitized by the Internet Archive  
in 2015

<https://archive.org/details/annualprogressre9869sout>





MASS. Y3.SR1/3: 94b

# OVERALL ECONOMIC DEVELOPMENT PROGRAM

GOVERNMENT DOCUMENTS  
COLLECTION

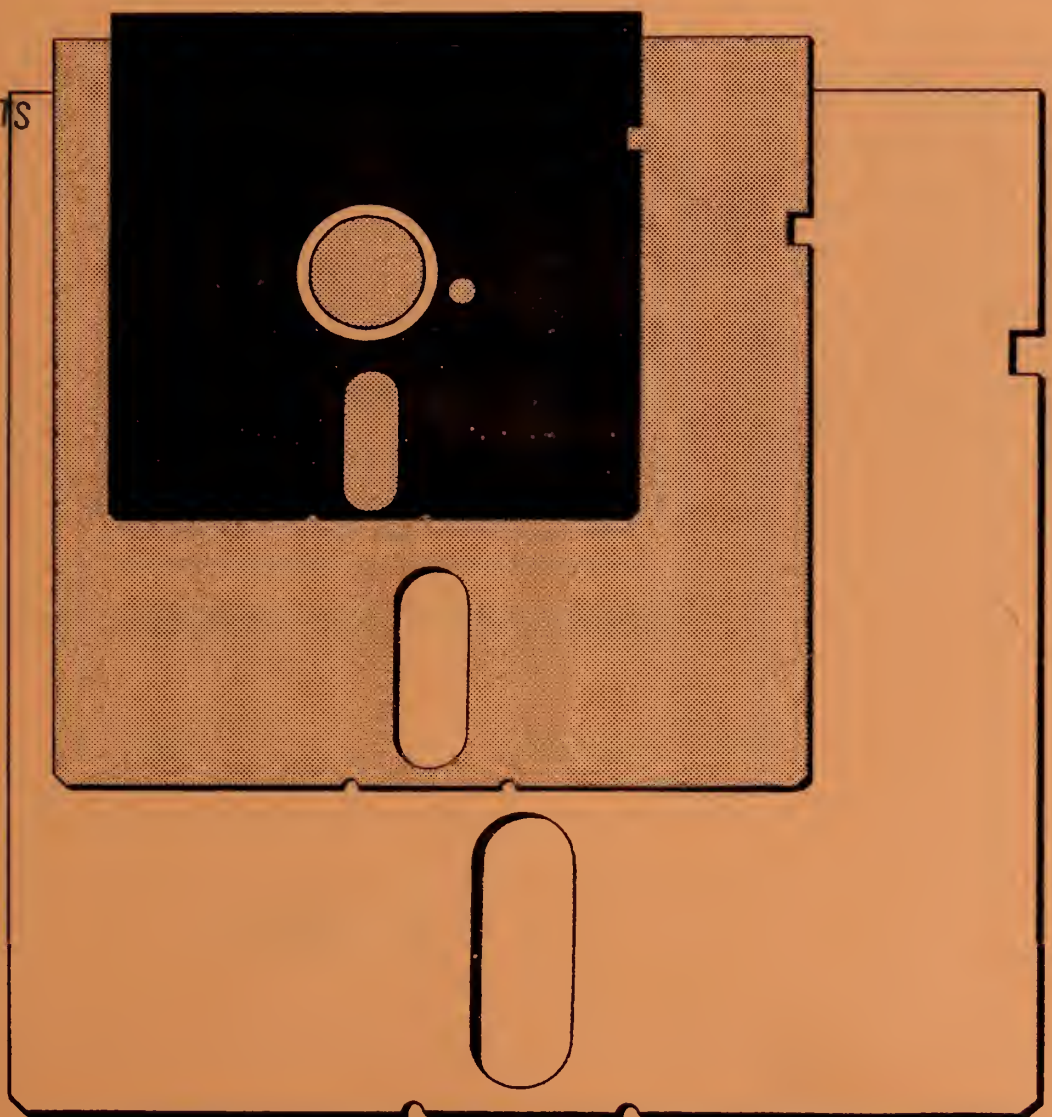
JUL 8 1987

University of Massachusetts  
Depository Copy

PREPARED BY

SOUTHEASTERN  
REGIONAL  
PLANNING  
AND  
ECONOMIC  
DEVELOPMENT  
DISTRICT

1986





SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT  
88 Broadway Taunton, MA 02780

1985  
ANNUAL REPORT  
and  
1986  
PROGRAM PROJECTION

OF THE

OVERALL ECONOMIC DEVELOPMENT PROGRAM

SEPTEMBER 1986



Prepared with funding from the  
U.S. Economic Development Administration

CREDITS

SRPEDD COMMISSION  
ECONOMIC DEVELOPMENT COMMITTEE

STAFF

Stephen C. Smith--Executive Director  
Maria Gooch--Director of Economic Development  
Anita Sabourin--Graphics Specialist  
Susan P. Green--Principal Secretary  
Joanne M. Bouchard--Senior Secretary/Senior Bookkeeper  
Nancy J. Bumbaugh--Secretary





## CONTENTS

I. INTRODUCTION.....	1
II. ADMINISTRATION.....	3
A. AREA DESIGNATION AND PARTICIPATING GOVERNMENTS.....	3
B. DISTRICT ORGANIZATION.....	4
III. DEVELOPMENT EFFORTS.....	11
IV. THE DISTRICT'S ECONOMY.....	18
V. ECONOMIC DEVELOPMENT CENTERS.....	21
VI. POTENTIAL FOR ECONOMIC DEVELOPMENT.....	23
A. ANALYSIS OF POTENTIALS.....	23
B. CONSTRAINTS.....	25
VII. STRATEGY AND IMPLEMENTATION.....	26
A. PROGRAM AND PROJECT SELECTION.....	26
B. PROGRAM CONSIDERATIONS AND COURSE OF ACTION.....	26
C. PLAN FOR IMPLEMENTATION.....	31
APPENDICES.....	38



# introduction





The mission of the Economic Development Administration (EDA) under the U.S. Department of Commerce is to enhance the national economy.\* EDA assists communities and areas experiencing economic distress to help themselves achieve lasting improvement. EDA's role is to support the effort of local people in devising their own programs to solve problems.

The program developed by local people to address an area's problems is the Overall Economic Development Program (OEDP). The OEDP is both a document and a process--a process of area self-analysis, planning, and action to create new economic activity and improve community facilities and services.

The Public Works and Economic Development Act of 1965, as amended, requires that redevelopment areas and economic development districts such as SRPEDD formulate an OEDP. EDA must approve the OEDP prior to designating redevelopment areas and economic development districts as qualified to receive assistance.\*\*

Continued eligibility of an EDA-designated redevelopment area or economic development district is contingent upon regular updating of the OEDP. This may be accomplished by submitting to EDA an Annual OEDP Report and Program Projection such as this one. Redevelopment areas located in a designated economic development district may satisfy this requirement by concurring with the district's annual report covering the area's activities.

An OEDP identifies assets and liabilities. It sets a course of action for dealing with problems created by unemployment and a sagging economy. Preparation of the OEDP is a process guided by a committee representing economic development interests in the area. Without this process efforts to tackle problems become disconcerted.

Beyond making it easier for an area to address economic problems, the OEDP also makes the area eligible for EDA funding. In southeastern Massachusetts, SRPEDD receives EDA funding to prepare an OEDP which makes six redevelopment areas eligible for EDA grants.

---

\*U.S. Department of Commerce, Economic Development Administration. EDA Handbook, June, 1977.

\*\* Guide for District Overall Economic Development Program, May, 1977.



Because SRPEDD updates the OEDP annually to maintain eligibility as an economic development district, member communities are also eligible for 10 percent bonuses on the total cost of public works projects.

The Annual OEDP does not include the detail of the original SRPEDD OEDP published in 1969. It provides, however, a review of accomplishments and significant changes in the economy during the past year and proposes a strategy to meet the new situation. This is a continuous and dynamic process.

The annual OEDP contains these elements:

- Fact gathering to assure understanding of current developments;
- Identification of potentials;
- Appraisal of urban places suitable to serve as centers for growth;
- Establishment of goals and intermediate objectives to direct development activities and measure progress;
- Devising a strategy for development--a plan to achieve goals and objectives (a listing of projects); and
- Provision of a work program proposing methods for implementation of the strategy and projects.

Beyond making the area eligible for EDA funding, the most important aspect of the annual OEDP, by far, is the listing of projects in the region to be funded by EDA. Projects are ranked in order of priority. The listing provides guidance to EDA on which projects should be funded first.



administration





A. AREA DESIGNATION  
AND PARTICIPATING  
GOVERNMENTS

On November 13, 1969, the Southeastern Regional Planning Commission was designated by the Economic Development Administration (EDA) as an Economic Development District (EDD) under Title VI of the Public Works and Economic Development Act of 1965.

The purpose of an Economic Development District is to foster successful economic development on a large scale by grouping together economically distressed and healthy areas--redevelopment areas and economic development centers or growth centers.

The District encompasses portions of three counties, twenty-eight municipalities and six redevelopment areas. The District's county membership includes: all of the communities in Bristol County with the exception of the Town of Easton; the towns of Carver, Lakeville, Marion, Mattapoisett, Middleborough, Plympton, Rochester and Wareham in Plymouth County; and Plainville in Norfolk County.

Four of the District's redevelopment areas--Bourne/Wareham/Rochester, New Bedford, Providence/Pawtucket, and Plymouth--were designated in 1966. The Fall River Redevelopment Area was designated in 1972 and the Taunton Redevelopment Area was designated in 1974. The Town of Mansfield is presently not included within a redevelopment area.

These redevelopment areas were designated on the basis of "substantial and/or persistent unemployment."\* Redevelopment area designation enables an area to be eligible for the whole range of programs authorized by the Public Works and Economic Development Act.

Redevelopment Areas were originally established on the basis of labor market area (LMA) information furnished by the Massachusetts Division of Employment Security (DES). Since designation, however, DES has changed the labor market area boundaries. The Bourne/Wareham/Rochester LMA has been eliminated, and Wareham and Rochester, both District communities, have been incorporated into the Plymouth and New Bedford LMA's respectively.

---

\*U.S. Department of Commerce, Economic Development Administration. Designated Redevelopment Areas under the Public Works and Economic Development Act of 1965, as Amended, October 1, 1978.



This new composition presents a problem by interrupting the continuity needed for trend analysis. Furthermore, the new labor market area boundaries are not similar to the federally designated Standard Metropolitan Statistical Areas (SMSA's) in the District--Fall River and New Bedford. Figure 1 shows the present labor market areas in the District for which DES provides information.

For the purposes of manpower planning DES has also established Service Delivery Areas (SDA's). Much of the statistical information is now provided for these geographic divisions.

The District also has two designated economic development centers (EDC's)--the cities of Fall River and Taunton--and a redevelopment center (RC), the City of New Bedford. These growth centers are the economic activity nuclei of their respective redevelopment areas.

Redevelopment Centers are those which are recognized as falling within a designated redevelopment area. Unlike economic development centers there is no limit on the population of RC's, which may be in excess of 250,000 as of the last federal census.

## B. DISTRICT ORGANIZATION

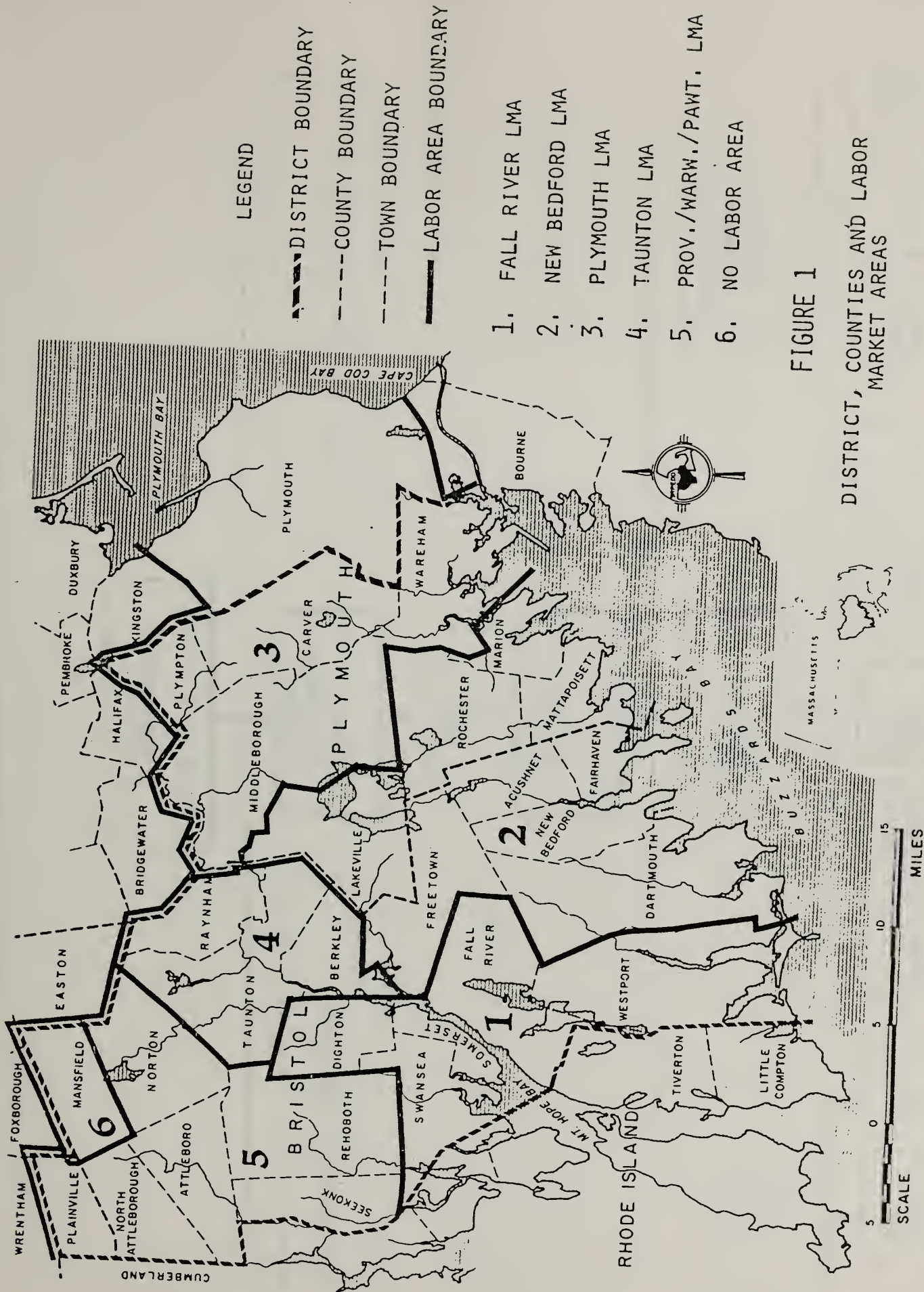
The Commission of the Southeastern Regional Planning and Economic Development District serves as the Overall Economic Development Program (OEDP) Committee for the District. The committee sets policy and provides guidance on all matters relating to the economic development of the District. But, because of its size, it relies on a smaller advisory committee, the Economic Development Committee (EDC) for specific recommendations.

The EDC is responsible in conjunction with the OEDP Committee for developing criteria, and ranking economic development projects in the District. The committee also guides and assists the overall staff effort to prepare and implement the District's economic development program.

Membership lists for both committees are included in this section.









ORGANIZATION OF SRPEDD ECONOMIC DEVELOPMENT FUNCTION

1984

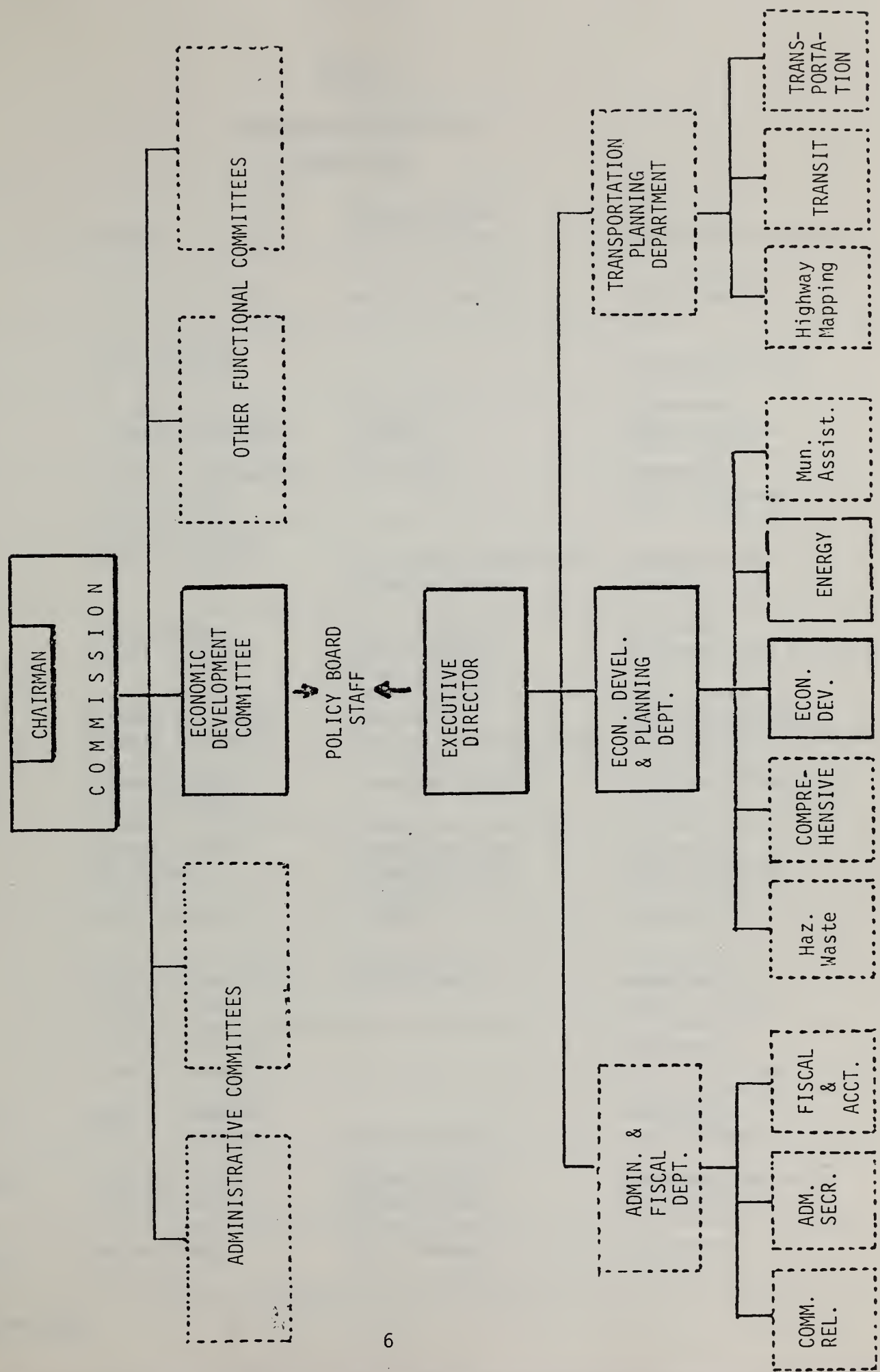




TABLE 1  
COMMISSION MEMBERS  
1985-1986

CITY/ TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
Acushnet	Leo N. Coons, Jr.*	Machinist/Welder	Local Planning
Attleboro	Leo Sicuranza Melville Moody		Business/Planning
Berkley	Lawrence Wilson S. Kenneth Woodward	Insurance Teacher	Government Education/Local
Carver	Arthur P. DeCoursey* Warren Greene*	Selectman	Government Local Planning
Dartmouth	Michael McCarthy Basil Castaldi*	Education Consultant/ Planning Board	Education/Local Planning
Dighton	Allan Campbell Manuel Ferreira*	Civil Engineer Restaurateur/ Planning Board	Government Business/Local Planning
Fairhaven	Kenneth R. Vining Raymond Fleurent*	Retired Contractor/Plan. Board	Elderly/Government Business/Local Planning
Fall River	Alfred Edwards* Robert P. Alves	Planning Director	Government/Planning
Freetown	Cynthia Cardin Paul Magee	Procedure Clerk Planning Board	Government Local Planning
Lakeville	Luke Leonard, Jr.	Teacher	Education
Mansfield	Joseph M. Zeneski* Marydee Flynn	Public Works	Government Local Planning
Marion	Richard Lagreze* Franklin Winters*		Government Local Planning
Mattapoisett	James F. Huntoon William Matthews*	Planning Board	Government Local Planning
Middleborough	Lawrence Carver John Santin, Jr.*	Advertising Planning Board	Government/Business Local Planning
New Bedford	Denise Poyant*	City Planner	Government

\*Elected Officials





CITY/ TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
North Attleborough	Felix T. Speight Patricia Redding*	Planning Board	Government Local Planning
Norton	Alan F. Fracalosi Janice Hayes*	Planning Board	Government Local Planning
Plainville	Andrea Soucy*	.	Government
Plympton	Lee Johnson Joyce Ruprecht*	Teacher Planning Board	Education Local Planning
Raynham	Emeline MacDonald Glenn R. Miller*	Retired Professor	Government Local Planning
Rehoboth	Suzanne M. DiPietro Diane M. Biello*	Planning Board	Government Local Planning
Rochester	George G. Bare	Industrial Engineer	Government
Seekonk	Charles Terzian*	Planning Board	Local Planning
Somerset	Donald J. Hussey Frank Mattos *	Advertising Planning Board	Government Local Planning
Swansea	Michael Finglas * Brian Gingras *	Executive Secretary	Government Local Planning
Taunton	Fernand Medeiros John L. Viveiros *	Mechanical Engineer Bacteriologist/P.B.	Government Local Planning
Wareham	Donald Carlson Ken Monast*	Selectman Planning Board	Government Local Planning
Westport	Julia S. Enroth * Edmund Medeiros *	Adminis. Assistant Teacher	Government Local Planning

#### COMMISSIONERS-AT-LARGE

Attleboro Area (1)

Fall River Area (2)	Paul F. Correia David R. Costa	Minority/Low Income Minority/Low Income
------------------------	-----------------------------------	--

New Bedford Area (2)

Taunton/Plymouth Area (1)

#### OFFICERS

George G. Bare, Chairman
Allan Campbell, Vice Chairman
Denise Poyant, Treasurer
Emeline MacDonald, Past Chairman
Lawrence Carver, Secretary
Donald Hussey, Assistant Treasurer

\*Elected Officials





TABLE 2  
ECONOMIC DEVELOPMENT COMMITTEE  
1986

SRPEDD COMMISSION MEMBERS

George G. Bare  
SRPEDD Chairman  
Rochester, Mass.

Emeline MacDonald  
Past SRPEDD Chairman  
Raynham, Mass.

Lawrence E. Carver  
SRPEDD Secretary  
Middleborough, Mass.

Patricia Redding  
SRPEDD Assistant Treasurer  
No. Attleborough, Mass.

Dr. Basil Castaldi  
EDC Chairman  
Dartmouth, Mass.

PUBLIC AND PRIVATE SECTOR

Heather G. Bare  
Consultant  
Rochester, Mass.

Aaron Mittleman, President  
New England Apparel Mfg. Assoc., Inc.  
Fall River, Mass.

Norman Bergeron  
Industrial Development Commission  
New Bedford, Mass.

Robert Smith  
Bristol County Development Council  
New Bedford, Mass.

Dennis DiZoglio  
Community Development Director  
Taunton, Mass.

Sharon Travers-Gay  
Community Development Director  
Middleborough, Mass.

Donald Geary  
Friends of the Bluffs  
Swansea, Mass.

Dr. Richard J. Ward, Dean, SMU  
College of Business and Industry  
North Dartmouth, Mass.

David Kennedy  
City Planning Department  
New Bedford, Mass.

Paul Vigeant, Director  
Jobs for Fall River, Inc.  
Fall River, Mass.

Wilton Wiles  
Division of Employment Security  
Middleborough, Mass.

Stephen C. Williams  
Durfee Attleboro Bank  
Fall River, Mass.

Ruth Kohler, Director  
Industrial Development Commission  
North Attleborough, Mass.

Constantine Yankopoulos  
Community Development Director  
Wareham, Mass.



William McAloon, Director  
Industrial Development Commission  
Taunton, Mass.

Walter Ramos, Director  
Mayor's Office of Community Development  
New Bedford, Mass.

Spyro Mitrokostas  
Governor's Office of Economic  
Development  
Boston, Mass.

Norman Zalkind  
SMU Foundation  
North Dartmouth, Mass.

William Spaner  
Community Development for Attleboro  
Attleboro, Mass.

Brenda Reed, Director  
S.E. Massachusetts Department of  
Commerce and Development  
New Bedford, Mass.



development  
efforts





A. EDA PROJECT  
DEVELOPMENT

From 1966 to 1985, the U.S. Economic Development Administration (EDA) invested over \$22 million dollars in the southeastern Massachusetts region. Table 3 outlines the projects funded.

INDUSTRIAL PARKS

Over \$7 million of this investment was in five industrial parks throughout the region, including:

- Fall River Industrial Park
- New Bedford Industrial Park
- North Attleborough Industrial Park
- Taunton Myles Standish Industrial Park
- Wareham Industrial Park

These parks have provided space for existing industries and attracted new industries. They have brought new jobs to the region and have helped improve the economic climate by supporting spinoff businesses, leveraging private investment and supplementing local property taxes.

Many of these EDA funded industrial parks have been so successful they are at or near capacity and are planning further expansion despite cutbacks in EDA public works grants. All 165 acres of the North Attleborough Park are spoken for. This development spanning 20 years provides space to 34 firms, employs over 2,000 people and generates \$400,000 in tax revenue a year.

In Fall River, construction of a \$1.1 million road project is underway to add 135 acres to their 210 acre park. This is one portion of a total \$6 million expansion. The Fall River Park currently houses 18 companies that employ 1,436 people.

In 1982 EDA funded the extension of Barnet Boulevard in the New Bedford Industrial Park. This \$2 million project will open up 200 additional acres. In Taunton, the Myles Standish Industrial Park is fast filling up with high technology related companies including GTE.

The availability of reasonably priced industrial land, a large skilled labor force, cooperative government officials and a quality of life second to none are



drawing the attention of the state to southeastern Massachusetts. Table 4 details the industrial expansion that occurred in 1985, much of it in EDA-supported industrial parks.

The industrial revenue bond program continued to provide the bulk of public support for industrial development and expansion. Although the Urban Development Action Grant (UDAG), "503 Program" of SEED Corporation, and EDA Revolving Loan Fund programs helped supplement the private investment, industrial revenue bonds provided approximately \$95 million in 1985, and were responsible for creating over 1,000 jobs (see Table 4).

#### REVOLVING LOAN FUNDS

Two revolving loan funds (RLF's) have been capitalized by EDA in southeastern Massachusetts in the past two years. In 1983 the City of Fall River received \$500,000 from EDA. They matched this with \$166,000 for a total pool of \$666,000 to provide loans to smaller businesses unable to take advantage of IRB, UDAG or "503 Program" financing.

In 1984, SEED Corporation was also awarded a \$500,000 RLF and matched this amount with \$500,000. The SEED RLF covers communities in Bristol County other than Fall River.

#### TECHNICAL ASSISTANCE AND INFRASTRUCTURE IMPROVEMENTS

Continued technical assistance to communities and planning investments from EDA to agencies such as SRPEDD have also insured development of cohesive, coordinated strategies for the area and implementation of overall goals. This process--a minimal investment of over one million dollars in 17 years--has insured cost effective use of federal funds.

Since 1968 EDA has also invested a little over \$10 million to improve the infrastructure of the four cities and provide other necessary facilities. The impact of this investment can be observed in the many revitalization efforts being undertaken in the region's cities.



TABLE 3  
EDA GRANTS TO MUNICIPALITIES  
**1966-1985**

DATE	COMMUNITY	PROJECT	GRANT
1966	Fall River	Port Development (T.A)	\$ 50,000
"	"	Vocational Tech. H.S. (P.W.)	3,053,000
"	New Bedford	Terminal Bulkhead (P.W)	2,902,000
"	Dartmouth	Extension of Water Distribu- tion Syst. (P.W.)	27,000
1967	Fall River	Industrial Expansion (T.A)	2,000
"	"	Ace Plastic (A.G.)	2,000
"	Plymouth	Waste Treatment Plant (P.W.)	1,056,000
"	"	Industrial Dev. Plan (T.A.)	25,000
1968	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	1,032,000
"	North Attleborough	Master Plan/Ind. Park (T.A)	20,000
"	Plymouth	Water/Sewer/Road to Industrial Park (P.W.)	393,000
1969	New Bedford	Water/Sewer/Road to Industrial Park (P.W.)	517,000
1970	Fairhaven	Industrial Park Study (T.A.)	8,000
"	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	200,000
1972	North Attleborough	Industrial Park (P.W.)	294,000
"	New Bedford	Urban Coalition/Red Crab Aqua- culture Proj. (T.A.)	108,000
"	Plymouth	Sewer Pump Station (P.W.)	188,000
1973	Taunton	Industrial Park Study (T.A.)	15,000
1974	New Bedford	Water Main Const. (P.W.)	1,294,000
"	"	Urban Coalition/Red Crab Pro- ject (T.A.)	5,000
"	Somerset	Water Transmission Line (P.W.)	450,000
"	Taunton	Sewer Main/Ind. Park (P.W.)	858,000
"	"	Technical Assistance	38,000
1975	Taunton	Water Syst. & Rail Spur/Ind. Park (P.W.)	521,000
"	"	Site Clearance/Ind. Park (P.W.)	94,000
"	Fall River	Feasibility Study of Bulkhead Construction (T.A.)	89,000





TABLE 3 CONT'D.

DATE	COMMUNITY	PROJECT	GRANT
1975	New Bedford	Street and Sidewalk Imp. (P.W.)	\$ 347,000
"	Wareham	Tremont Dam Rest. (P.W.)	400,000
1977	New Bedford	Rehab/Piers 3 and 4 (P.W.)	314,000
"	Wareham	Industrial Park (P.W.)	419,000
1978	North Attleborough	Ind. Park Exp. (P.W.)	1,670,000
1979	Taunton	Roadway/Site Improvements to Industrial Park (P.W.)	1,687,000
"	New Bedford	Industrial Land Dev. (T.A.)	42,000
"	Wareham	Water Mains (P.W.)	615,000
1980	Fall River	State Pier	2,175,000
"	"	Planning (T.A.)	19,000
"	NEAMA	Import Compet. Assistance (T.A.)	169,000
1982	New Bedford/Dartmouth	Extension of Barnet Boulevard in the Industrial Park	592,015
1983	Fall River	Revolving Loan Fund	500,000
1984	SEED Corp.	Revolving Loan Fund	500,000
TOTAL:			\$22,159,315

SOURCES: 1. U.S. Economic Development Administration, 1979 Annual Report; 1980 Annual Report.

2. U.S. Economic Development Administration, EDA Directory of Approved Projects, March 31, 1978.

P.W. - Public Works

T.A. - Technical Assistance





## MAJOR DEVELOPMENT PROJECTS

Major development occurred throughout the region in 1985. Most of the commercial and industrial development was financed through the Industrial Revenue Bond (IRB) Program. Financing under SBA's "503 Program" also played a role along with Urban Development Action Grants (UDAG's). Although Table 4 does not include all development projects, it does provide a gauge of the development which occurred throughout the region in 1985. Southeastern Massachusetts saw continued high activity in industrial development bonds in 1985. Not including the bonds for Energy Answers Corporation in Rochester, IRB's accounted for approximately \$40 million in 1984 and \$45 million in 1985. Over 1,000 jobs were created by projects financed with IRB's.



# MAJOR DEVELOPMENT INVESTMENTS\*

1985

COMMUNITY	DESCRIPTION	INVESTMENT	JOB
Attleboro	Peckham Corp.	\$ 985,000 IRB	10
Dartmouth	Den Mar Corp.	500,000 IRB	19
Fall River	LIX Corp.	999,000 IRB	60
"	Riggenbach Realty	600,000 IRB	--
"	Lightolier, Inc.	5,000,000 IRB	140
"	Bristol Craft Mfg. Inc.	600,000 IRB	45
"	American Dryer Corp.	5,700,000 IRB	150
"	Riggenbach Realty II	800,000 IRB	--
"	Argus Realty Ltd. Partnership	1,150,000 IRB	110
"	Robbins Manufacturing Co., Inc.	1,600,000 IRB	9
"	McCreary Tire Sales of Fall River, Inc.	600,000 "503"	22
Mansfield	Boston Envelope Co., Inc.	3,800,000 IRB	19
North Attleborough	Greenwood Motors, Inc.	90,000 IRB	--
"	EDA Machine & Controls	520,000 IRB	8
"	Shelby Fox Co., Ltd. Partnership	1,400,000 IRB	--
"	Hybrid Enclosures	600,000 IRB	55
"	LeStage Manufacturing Co.	600,000 IRB	7
New Bedford	Universal Industries Inc.	1,800,000 IRB	12
"	Alberox Corp.	1,200,000 IRB	10
"	13 Hamilton St. Partnership	235,000 IRB	--
"	American Press, Inc.	700,000 IRB	6
"	Satkin Mills, Inc.	800,000 IRB	10
"	New Bedford Railroad Depot, Inc.	7,000,000 IRB	--
Plainville	Media-Logic Inc.	400,000 "503"	14
Rehoboth	Land-Tek Maintenance, Inc.	240,000 "503"	6
Rochester	Energy Answers Corp.	40,000,000 IRB	129
Swansea	Home for the Aged People in Fall River, Inc.	2,433,150 IRB	35
Taunton	Butler Shoe Corp.	3,100,000 IRB	20
"	R.C. Read & Co., Inc.	700,000 IRB	5
"	Metabyte Corp.	1,730,000 IRB	30
"	Advanced Dielectric Technologies, Inc.	1,950,000 IRB	125



TABLE 4 (CONT'D)

COMMUNITY	DESCRIPTION	INVESTMENT	JOBS
Taunton	George D. Emerson Co., Inc.	\$ 830,000 IRB	5
"	New Taunton Realty Trust	2,500,000 IRB	--
"	Newbest Polybag Co., Inc.	400,000 IRB	7
"	Process Control Industries, Inc.	1,900,000 IRB	30
"	Pocomo Realty Trust	800,000 IRB	--
"	Taunton Liquors	440,000 "503"	13
Wareham	Mass Pak Corp./Seal Tech Corp.	1,100,000 IRB	14
"	Tons of Toys 'N More, Inc.	708,000 IRB	19
All Communities	Total	\$96,510,150	1,144

\*Includes projects financed with Industrial Revenue Bonds (IRB's) and SBA's "503 Program".





the  
district's  
economy



## A. INTRODUCTION

### 1. THE BROADER PICTURE

Today the Massachusetts economy is booming. The state's unemployment rate is below the nation's for the eighth year in a row and personal income is rising faster than in any state except Alaska. For the businessman the state's biggest problem is the shortage of qualified people to fill openings.

Several factors are responsible for the turnaround according to economists:

- The emergence of the high technology industry which has generated approximately one-third of the 40,000 new jobs created since 1975;
- The growth in the state's defense industry;
- The growth in the service sector which included various occupations from janitors to lawyers and doctors; and
- A stable population growth.

Southeastern Massachusetts, the area covered by the District's boundaries, registered an unemployment rate of 5.9 percent in 1985. The region is finally benefitting by the influx of high technology firms in the state. The northwestern part of the District has seen most of the region's growth in this industry. The Fall River and New Bedford areas, however, still rely heavily on the textile and apparel industries. This accounts for the overall poorer performance of the region's economy as compared to the state. Massachusetts registered an unemployment rate of 3.9 percent in 1985.

Southeastern Massachusetts, however, is beginning to diversify its industrial base. The area is reinvesting in rapid growth industries and focusing on its more mature industries.

The Route 128 "belt" which surrounds Boston is becoming saturated. The cost of land and construction is high and labor competition is intensive. The outer circumferential highway, Route 495, is perceived as increasingly attractive. With an ample supply of labor, communities in the Route 495 "belt" have much potential for industrial development. Industrial parks in Mansfield, North Attleborough and Taunton have already begun experiencing an inflow of high technology firms. Future growth is expected in industrial areas in Norton, Middleborough and Wareham as well. The spinoff impact will also be felt in Fall River and New Bedford.



TABLE 5

EMPLOYMENT AND UNEMPLOYMENT  
ANNUAL ADJUSTED AVERAGES

LMA	LABOR FORCE		EMPLOYMENT		UNEMPLOYMENT RATE	
	1984	1985	1984	1985	1984	1985
*Fall River LMA	68,686	71,813	63,400	67,072	7.7	6.6
Dighton	2,558	2,679	2,343	2,501	8.4	6.6
Fall River	42,019	43,883	38,507	40,723	8.4	7.2
Somerset	9,740	10,206	9,139	9,665	6.2	5.3
Swansea	7,687	8,059	7,238	7,655	5.8	5.0
Westport	6,682	6,986	6,173	6,528	7.6	6.6
New Bedford LMA	85,670	91,312	79,306	85,482	7.5	6.4
Acushnet	4,767	5,109	4,525	4,887	5.1	4.3
Dartmouth	12,532	13,419	11,815	12,760	5.7	4.9
Fairhaven	7,791	8,335	7,303	7,887	6.3	5.4
Freetown	3,637	3,892	3,419	3,692	6.0	5.1
Lakeville	2,892	2,915	2,736	2,785	5.4	4.5
Marion	1,928	2,055	1,755	1,896	9.0	7.7
Mattapoisett	2,987	3,198	2,810	3,035	5.9	5.1
New Bedford	47,572	50,714	43,463	46,942	8.6	7.4
Rochester	1,564	1,675	1,480	1,598	5.4	4.6
Plymouth LMA	37,577	38,806	34,822	36,563	7.4	5.8
Carver	3,046	3,065	2,848	2,900	6.5	5.4
Middleborough	7,676	7,713	7,123	7,252	7.2	6.0
Plymouth	16,784	16,887	15,700	15,983	6.5	5.4
Plympton	967	973	909	925	6.0	4.9
Wareham	9,104	10,168	8,242	9,503	9.5	6.5
Taunton LMA	26,850	27,987	25,008	26,466	6.9	5.4
Berkley	1,253	1,315	1,161	1,239	7.3	5.8
Raynham	4,786	4,836	4,597	4,679	3.9	3.2
Taunton	20,811	21,836	19,250	20,548	7.5	5.9
*Providence/Warwick/ Pawtucket LMA	42,352	50,471	39,536	47,837	7.1	5.2
Attleboro	15,189	18,546	14,065	17,553	7.4	5.4
North Attleborough	9,268	11,334	8,628	10,768	6.9	5.0
Norton	6,873	6,933	6,521	6,639	5.1	4.2
Plainville	2,572	3,144	2,390	2,983	7.1	5.1
Rehoboth	3,216	3,920	2,962	3,696	7.9	5.7
Seekonk	5,414	6,594	4,966	6,198	8.3	6.0
Mansfield	7,212	7,307	7,023	7,150	2.6	2.1
District Total	268,527	270,809	249,095	254,870	7.3	5.9
Massachusetts					4.8	3.9
U.S.A.					7.5	

SOURCE: Massachusetts Division of Employment Security. "Job Market Research," February, 1986.

\*The Fall River LMA data does not include Tiverton and Little Compton in Rhode Island. The Providence/Warwick/Pawtucket LMA data does not include the Rhode Island portion of the LMA.

LMA=Labor Market Area





economic  
development  
centers





When Congress passed the Public Works and Economic Development Act of 1965, it envisioned economic development centers or growth centers as nuclei from which all economic activity would emanate. Growth centers became the anchors on which economic development districts would depend to alleviate the economic distress of their redevelopment areas.

The District's growth centers, as designated by the U.S. Economic Development Administration, are the cities of Fall River, New Bedford and Taunton. These centers are characterized by population concentrations. They maintain a level of economic activity which generates jobs for people in nearby towns and they provide to a large extent the necessary social and economic services.

In 1985 the City of Fall River recovered considerably from the setback experienced in 1982 in terms of unemployment. The number of unemployed persons in the city's labor force increased from 8.6 percent in 1980 to 12.9 percent in 1982 and declined to 7.2 in 1985.

The City of New Bedford also showed improvement in its employment situation. The percentage of unemployed persons in the labor force increased from 8.6 percent in 1980 to 14.3 percent in 1982 and declined to 7.4 in 1985. The City of Taunton experienced a jump in the unemployment rate from 7.9 percent in 1980 to 12.0 percent in 1982 and a decrease to 5.9 in 1985. The Taunton Myles Standish Industrial Park funded with EDA money has experienced tremendous growth over the past year. Located next to Interstate 495 the park holds much potential for future growth.

The cities of Fall River and New Bedford continued to depend on the apparel and related products, and textile industries for the majority of the manufacturing jobs. For the three growth centers most of the employment growth since 1967 occurred in the service sector.

Although the population of southeastern Massachusetts is expected to grow at a higher rate than the rest of the state in coming years, the majority of the growth is expected to occur in smaller urban municipalities and rural communities which serve as "bedroom communities" for Boston and Providence. The only growth center in the District expected to show an increase in population from 1975 to 2000 is the City of Taunton (a 4.2 percent increase). Fall River is expected to register a decline of 3.9 percent and New Bedford 4.5 percent.



The three cities need to expand manufacturing sector opportunities. The cities of Fall River and New Bedford, especially, depend heavily on limited growth industries. The cities need to provide the kind of climate that will help revitalize these industries and help them expand. This effort should be coupled with continued recruitment of high technology and other growth industries to broaden the industrial base.

In the recent past, the three cities have committed large amounts of federal and private funds to revitalize their central business districts and improve their infrastructures. These efforts may result in more substantial increases in wholesale/retail trade employment and also in other employment sectors, and may have a positive impact on the economy of their respective redevelopment areas. In light of these efforts, and state and federal urban growth policies, the three growth centers may still fulfill their purpose. Much of the economic situation experienced by the three cities has been due to trends also taking place at the state and national level: cutbacks in many federal programs; the recent recession of 1982; the recession of 1974 and 1975; double digit inflation; declining manufacturing sector; and costly energy supplies.

Economic activity, however, is not restricted to growth centers. The District has a number of older urban communities which have experienced substantial growth in the recent past. Of the four cities in the District, the City of Attleboro has the strongest economy. The city relies heavily on the metal products industry and boasts a large high technology firm, Texas Instruments, which employs approximately 5,000 people. In 1985 the city's unemployment rate was 5.4 percent. Attleboro provides almost twice as many jobs as the growth center of Taunton. Attleboro is also expected to show a population increase of 16.3 percent by the year 2000. The city, however, is part of the Providence/Pawtucket Redevelopment Area and as such is oriented toward a larger nucleus, the City of Providence.

Another urban municipality providing substantial employment is North Attleborough. The North Attleborough Industrial Park, funded with EDA money, provides over 1,000 jobs. Mansfield has been growing substantially with the development of its Cabot, Cabot & Forbes Industrial Center. Middleborough also has much potential for growth with its new Commerce Park and strategic location next to I-495. Wareham is another community which has been experiencing growth and holds much potential for the future.



potential  
for  
economic  
development







A. ANALYSIS OF  
POTENTIALS

The District has a number of characteristics which offer great potential for economic development. To reiterate, some of these characteristics include:

- Land--plentiful and fairly inexpensive;
- Water--abundant in comparison with the rest of the state and nation;
- Transportation--network offering excellent accessibility to all areas of the District and major areas such as Boston, Providence and Cape Cod. The area also boasts two major seaports, one in the City of Fall River and another in the City of New Bedford.
- Labor Force--a versatile and abundant labor force.
- Infrastructure--established urban areas with available land, building space and other amenities for industrial and commercial development; and
- Foreign Trade Zone--a designated zone in the City of New Bedford.

One of the District's best characteristics is its abundant labor force. As analyzed in the section on the economy there are still unemployed members of the labor force. Southeastern Massachusetts offers growing businesses a source of labor not available in the Boston area and other parts of the state.

There is indication from several recent studies that the high technology industry, presently located around Boston, may be willing to locate in the District and draw upon the available labor pool. An especially attractive area is the Route 495 "belt," the outer ring to Route 128 around Boston. But the high technology industry is not the single answer. The region needs to concentrate on small business creation, where most new jobs occur.

At the local level there are a number of EDA projects which offer great potential for industrial development and the overall diversification needed by the District. Some of these projects include: the Myles Standish Industrial Park in Taunton on the periphery of Interstate 495; the Airport Industrial Park in Fall River; the New Bedford Industrial Park; the North Attleborough Park; and the Wareham Industrial Park.



The Foreign Trade Zone in New Bedford is a project which also offers much potential. To date, this zone has not been developed. Because it is a general purpose zone, it is expected that it will take longer to be developed. The expansion of New Bedford's docking facilities and eventual replacement of the New Bedford-Fairhaven Bridge should spur more interest in the zone in the near future.

Designation as a foreign trade zone means that the area is under U.S. Customs supervision and may receive foreign merchandise without the usual immediate customs entry. Products, materials and components may be exhibited, stored, assembled, or used in manufacture within the zone. Duties do not have to be paid unless and until the goods or their finished products enter the U.S. Customs territory from the zone.

The District will continue to assist in the development of all economic development related projects offering good potential. Other local projects which the District has been involved in to varying degrees include urban revitalization efforts.

Agriculture, fishing and tourism also offer great potential for the District. Cranberry farming, scalloping and tourism in general have been growing in the area and are expected to continue growing. Ongoing historical preservation and other urban revitalization efforts should have a direct beneficial impact on tourism.

A new area of potential is the creation of jobs by growing small businesses already located in the region. The District has many small businesses which could become the giants of tomorrow in the high technology field and other growth areas. By creating the South Eastern Economic Development (SEED) Corporation and staffing its operations, the District has provided a financing mechanism to assist these businesses to grow.



## B. CONSTRAINTS

Some of the District's worst constraints are somewhat beyond local or regional control but follow state and national trends. They include the higher cost of doing business in this part of the nation; generally higher tax rates and insurance premiums; costly and less available energy supplies; and high shipping costs due to distance from growing market areas.

More specific District constraints include:

- Manufacturing--a declining manufacturing sector;
- Mature Industries--a need to revitalize "mature" or declining industries such as apparel and related products and textiles.

A constraint which affects all Massachusetts communities is "Proposition 2½." The lack of additional town revenues generated by new development of property is seen as a strong anti-growth effect of the statute. The proposition limits the tax levy to a 2.5 percent increase from each previous year. Therefore, an increase in the tax base produced by a new development will be absorbed into the general levy and the tax rate. The result is that a town will have to share existing services with the new development, because no additional revenues will be generated for the community. Otherwise, additional tax revenues would be used to provide roads and infrastructure for new developments. There is a need for corrective legislation to prevent the potential loss of industrial projects to other states.

Another constraint which is national in nature is the "Reagan Budget," which has cut EDA programs and other urban revitalization programs desperately needed by southeastern Massachusetts.

Since the late 1960's EDA has provided grants which have prepared most of the industrial parks in the region. These parks have been very successful. EDA in effect has provided the seed money for industrial growth and jobs. Three of the region's parks are still looking to EDA for additional assistance to develop more space to attract growth industries. It is unlikely that the District's oldest cities will be able to finance these investments alone. Yet, unless the Administration recognizes these infrastructure needs, the economic revitalization of the region will suffer.

Small businesses, which are responsible for most new job creation, also need assistance to survive and grow. Support should include financial assistance along with other needed services such as those provided in an incubator.





# strategy and implementation





## A. PROGRAM AND PROJECT SELECTION

The existing economic development goal and objectives for the District were adopted October 26, 1983, by the SRPEDD Commission. They provide guidance for the District's work program and project selection process. They are:

### GOAL

ECONOMY: Strengthen and diversify the region's economic base through the expansion of existing businesses and the attraction of new growth businesses which will create needed and better paying jobs; assist in preparing the region for its "re-industrialization" in terms of manpower training, financing incentives; governmental coordination and infrastructure development.

### OBJECTIVES

1. Encourage the expansion of existing industries and the establishment of new industries by providing financing assistance (SEED, UDAG's, etc.), other support services and serving as an information resource for the region.
2. Provide technical assistance to local development, industrial development, community development corporations, chambers of commerce, and other local and regional economic development agencies.
3. Provide assistance to the private sector, especially in the areas of information and investment financing through SEED Corporation.
4. Make known the locational benefits of the region, such as the relatively plentiful and qualified labor, land and water; the coastal location; quality of life; and the good transportation network.
5. Provide for coordination of manpower training programs and needs of industry.

In August 1986, the Economic Development Committee also adopted a set of criteria for ranking projects submitted by municipalities and non-profit groups in the District. Table 6 outlines the criteria.

## B. PROGRAM CONSIDERATIONS AND COURSE OF ACTION

Table 7 outlines the District's proposed program. It is a listing of projects which are of high priority for the region in its economic development strategy. Table 8 lists all projects in priority order as recommended by the Economic Development Committee and adopted by the District Commission in September 1986.

Table 10 presents a comprehensive list of infrastructure improvements vital to the economic health of the District. They are listed separately because in all likelihood they will be funded with sources other than EDA. They represent major capital expenditures needed to maintain existing facilities or to provide new services. The projects have not been ranked in priority order.

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

THE UNIVERSITY OF CHICAGO PRESS  
54 EAST LAKE STREET, CHICAGO, ILL. 60601  
U.S.A. AND CANADA: 1-800-842-6796

TABLE 6  
EDA PROJECT RANKING CRITERIA

CRITERIA	POINTS					
	5	4	3	2	1	0
1. Geographical Benefit - What area does the project impact?	Entire SRPEDD Region	Labor Market Area (LMA) only	City- or Town-wide	Neighborhood	Negligible	No Benefit
2. Permanent job retention/creation	Over 1,000	500-999	200-499	20-199	0-19	None
2. Temporary or Spinoff jobs	Over 500	200-499	50-199	20-49	0-19	None
3. EDA Cost Per Permanent Job Created/Retained	Less than \$1,000/job	\$1,001-2,500/job	\$2,501-5,000/job	\$5,001-10,000/job	\$10,001-20,000/job	Over \$20,000/job
Local Unemployment Rate	Over 10%	9-9.9%	7-8.9%	5-6.9%	3-4.9%	Under 3%
Private Investment Generated	500% or More of Grant Amount	300-499% of Grant Amount	100-299% of Grant Amount	50-99% of Grant Amount	0-49% of Grant Amount	No Private Investment
Status of Project/EDA	EDA has requested final application	Pre-App. Requested by EDA	Profile Requested by EDA	Feasibility Study Completed	Ranked by SRPEDD in 1985	Thinking Stage
b Status of Project/Local	Ready to go					Idea Stage
Promotion of Agriculture, Fishing, Tourism or Small Bus. Creation	Maximum Beneficial Impact					Adverse Impact
Need for Project	Urgent--No Public Investment Yet Made					No Need
3 - 0						
Energy Development	Maximum Production Conservation			Maximum Consumption		
Manpower Training Opportunities	Initiates Innovative Program			Imports Labor from Outside		



## EDA PROJECT RANKING CRITERIA

BONUS CRITERIA	2	0
1. Growth Center	Project is located in a Growth Center (New Bedford, Fall River Taunton and Attleboro)	Project is not Located in a Growth Center
2. Downtown/Urban Revitalization	Project Directly Supports Downtown/Urban Revitalization	Project Does Not Directly Support Downtown/Urban Revitalization
3. Innovative Project	Project Meets an Economic Development Need in an Innovative Manner	Project Does Not Address an Unmet Need
4. Cooperative Venture	Project Involves more Than One Community	Project Does Not Involve More Than One Community
5. Minority Enterprise	Project Supports the Development of Minority Enterprise	Project Does Not Directly Assist the Development of Minority Enterprise







TABLE 7  
RANKING OF HIGH PRIORITY PROJECTS  
1986-1987

<u>PROJECTS RANKED</u>	<u>AVERAGE POINTS</u>
1. Completion of Myles Standish Boulevard in the Industrial Park--Taunton	47.5
2. Access to industrial land off Church Street--New Bedford	41.7
3. Phase II of the Industrial Park--Wareham	39.8
4. Utilities for the Great Ponds Industrial Park--Lakeville	37.5

PROJECTS IN THE IDEA STAGE  
(Not ranked this year)

- Industrial Site, Route 6, Seekonk      \$ 500,000
- Pine Street Industrial Park, Seekonk      \$2,000,000



TABLE 8

## PRIORITY PROJECTS

1986-1987

LOCAL PRIORITY	PROPOSED PROJECTS DESCRIPTION & LOCATION	NO.	RELATED GOALS*	FUNDING (in thousands)			INITIATION COMPLETION DATE	AGENCIES RESPONSIBLE (IF ANY)	ENVIR. IMPACT (IF ANY)	NO. OF JOBS CREATED
				SOURCES AND AMOUNTS	ESTIMATED TOTAL COST	OTHER				
				FEDERAL	STATE	LOCAL				
1	Myles Standish Industrial Park Boulevard, Taunton	1	1	EDA \$765	\$735		Oct. '86- April '87	TDC		1,000
1	Access to Industrial land, New Bedford	1	2	EDA \$175	\$562	\$200	Sept. '87- March '88	City of New Bedford		450
1	Industrial Park, Phase II, Wareham	1	3	EDA \$120	\$30	\$150	Oct. '86- April '87	Town of Wareham		700
1	Great Ponds Industrial Park Infrastructure, Lakeville	1	4	EDA	\$120	\$600	Sept. '87- March '88	Town of Lakeville		1,000

EDA=Economic Development Administration  
TDC=Taunton Development Corporation



C. PLAN FOR  
IMPLEMENTATION

1. DISTRICT STRATEGY

a. Rationale

The overall purpose of the Public Works and Economic Development Act of 1965, as amended is...

*To provide grants for public works and development facilities, other financial assistance and the planning and coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.*

The District program is funded under this legislation. Since its establishment in 1969, the District has developed projects and conducted other economic activities with EDA assistance in the struggle to improve the economic viability of southeastern Massachusetts. The focus of these activities have been twofold: planning efforts to facilitate public and private investment in the region and project specific development primarily in the region's ports and industrial parks.

Although the national recessions of 1974-1975 and 1982-1983, had severely impacted the region's mature manufacturing base and hindered many of the District efforts, 1985 was a boom year. The unemployment rate continued to decline to 5.9 percent, down 1.4 percent from 1984. Announcement of several major development projects in 1985 indicates that major expansion will continue into 1986.

Southeastern Massachusetts, however, still trails behind other parts of the state and New England with its economic recovery. This is partially due to the lack of movement of high technology industries into the region. Southeastern Massachusetts, however, with its available labor force and more reasonable real estate costs, is becoming more and more attractive to growth industries.

In the Fall River and New Bedford areas there is a high reliance on the apparel and textile industries. Historically these industries have not done well in recessionary times. In fact these industries have been and continue to be negatively impacted by foreign imports.

In the Attleboro area the jewelry industry faces the same plight as the apparel and textile industries. The area, however, has a more diversified industrial base than the Fall River or New Bedford areas.





Southeastern Massachusetts, however, is beginning to diversify its industrial base. The area is reinvesting in rapid growth industries and export-oriented services.

With the Route 128 "belt" becoming saturated from labor competition, the Route 495 "belt" in the region is perceived as increasingly attractive. The future of communities in the Route 495 "belt" looks bright in terms of industrial development and office market potential. Industrial parks in Mansfield, North Attleborough and Taunton have already begun experiencing an inflow of high technology firms. Future growth is expected in industrial areas in Attleboro, Fall River, New Bedford and Wareham as well.

In order for southeastern Massachusetts to follow in the steps of the state and New England, however, it must become aggressive in its approach to attract high technology and other growing industries. Conversely, it is important that the region maintain existing industries like apparel, textiles and jewelry, which represent almost half of all manufacturing jobs and make a concerted effort to help the small businesses starting up in the region to survive and grow.

To put it simply, the District's major goal is to create jobs and revitalize the region's economy. Its strategy as alluded to in the preceding discussion is to pursue a double pronged approach.

- Provide opportunities and create a favorable climate for existing businesses to expand; and
- Attract new growth industries which will help diversify the economic base of the region.

The strategy is based on the reality of economic development -- that the majority of business expansions come from existing businesses. The District, therefore, needs to revitalize its more mature industries -- apparel, textiles and jewelry; and help its small growth industries to expand.

On the other hand, the District also needs to diversify its economic base since its older industries are extremely susceptible to recessionary trends. So far the District has not benefited substantially by the growth of high technology industries and other growing industries located close-by in Massachusetts. It is not far fetched to believe, however, that if southeastern Massachusetts can offer the incentives which growing industries seek, they will locate and expand in the area.



THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES

REPORT OF THE  
COMMISSIONERS OF THE  
UNIVERSITY OF CHICAGO  
FOR THE YEAR 1900

CHICAGO  
UNIVERSITY OF CHICAGO PRESS  
1901

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES

REPORT OF THE  
COMMISSIONERS OF THE  
UNIVERSITY OF CHICAGO  
FOR THE YEAR 1901

CHICAGO  
UNIVERSITY OF CHICAGO PRESS  
1902

b. Project Implementation

The District's strategy is being implemented through the development of high priority projects listed in the OEDP. These projects for the most part consist of providing opportunities for existing small businesses to expand and preparing the infrastructure and other amenities necessary to attract new industry.

During the past year it has become evident that the District needs to provide more attention to small start-ups indigenous to the region. Small, innovative businesses being formed by those in the "128 belt" who cannot afford the high costs associated with that region can be drawn to southeastern Massachusetts if the proper facilities are provided.

In the cities of Fall River and New Bedford prepared industrial space is needed and the District has worked with the cities to expand their industrial parks. These projects will provide prepared industrial space for existing industries to expand and for new industries coming into the region.

The District will continue to develop projects which meet its strategy. As projects are approved and funded by EDA, the District will continue to work with those involved to insure timely completion and accomplishment of stated objectives. The District will provide the technical assistance needed to maximize the economic benefits gained by EDA investments.

A new focus for the District since 1982 has been small business financing and technical assistance. This effort has expanded in 1985. Small business financing provided by SEED Corporation's "504 Program" and a SEED revolving loan fund capitalized with \$500,000 from EDA and another \$500,000 from the state continued in 1985. In addition, SEED began development of a small business incubator in 1985 to provide flexible rental space and shared services which will help small start-up businesses to survive.

The District is running a project to assist businesses with proper management of industrial hazardous wastes and has also helped local companies reduce energy costs by marketing and managing an industrial energy audit program in conjunction with the Executive Office of Energy Resources. Both these projects help established businesses become more profitable.



## 2. TASKS AND PROPOSED ACTIVITIES

### a. Coordination/Outreach

The focus of all project development and coordination/outreach activities conducted by the District is the development of projects which will benefit the economic climate of the region and implement the District's strategy. This task will account for 70 percent of the total work effort.

1) OEDP Priority Projects--The District will continue to work on those projects listed in the OEDP to insure that the proper steps are taken and that the coordination necessary for implementation is conducted. This year the District, through its financing arm, SEED Corporation, will work on a project funded by EDA. The project consists of construction of a 35,000 square foot building to provide "incubator" space for start-up and young small businesses in the region.

The rationale for the project is that small businesses with 20 employees or less create most of the new jobs in this country. Yet many of these businesses do not have the space or support services necessary to survive. Last year over 600,000 new business incorporations were formed. Seventy-five percent of these small businesses are expected to fail within the next two years. The entrepreneurs and job creators of tomorrow have many strikes against them--lack of efficient space, lack of financing and lack of support from clerical to management assistance. In addition these businesses have little credibility operating out of garages and other substandard industrial space.

Since 1969, the District has worked with communities to establish five EDA-funded industrial parks. These parks have provided needed space to growing businesses. The "incubator" proposed by SEED will prepare small businesses for their next step--the industrial park. By providing needed support services and flexible space, from 300 to 3,000 square feet, the incubator will help small businesses to survive and grow into the next phase. Established incubators have found that only 15 percent of the small businesses located in such an environment fail. Incubators identify an area's human resources, then provide an environment that helps people become successful entrepreneurs.

2) Technical Assistance--An ongoing function of the District is to provide technical assistance to communities on economic development problems. This year, under a special contract with the Town of Wareham, a special study of the bypass of the Cranberry Highway, a well established but blighted commercial strip linking I-495 to Cape Cod, was undertaken. Assistance to Middleborough and Seekonk has





also provided as part of their master plan updates. Assistance to other communities will be provided as necessary.

The District also has an ongoing planning assistance contract with the City of Fall River. Under this special contract SRPEDD staff assists the city with its economic development efforts.

3) South Eastern Economic Development (SEED) Corporation-- The District will continue to staff SEED Corporation. In the coming year staff hopes to package 10 applications for small business financing under SBA's "504 Program." Staff will also strive to provide financing to 10 small businesses under EDA's Revolving Loan Fund Program. These applications should provide an average of 200 new jobs in the region.

In addition, the District staff will organize meetings of the Board of Directors, the Loan Review Committee and the Small Business Incubator Steering Committee. Staff will work on developing the small business incubator funded by EDA. Staff will work with the steering committee to set up guidelines and development management procedures for the "incubator," and will oversee construction of the building.

4) Energy Advisor Service--For the second year, the District will provide energy audit services to 200 eligible companies in the region. This program, under contract with the Massachusetts Executive Office of Energy Resources, has provided energy cost reduction audits to 20 companies.

5) Ongoing Activities Ongoing coordination activities will include meetings with and/or membership in the following groups: industrial development commissions; chambers of commerce; economic development staffs in New Bedford, Fall River, Attleboro, Taunton, Middleborough and Wareham; private industry councils; Bristol County Development Council; Plymouth County Development Council; College of Business and Industry, Southeastern Massachusetts University; Center for Economic Development, University of Massachusetts; Massachusetts Economic Development Group; the Massachusetts Economic Development Council; and the Small Business Development Center. Ongoing coordination with the Economic Development Representative for EDA and with state agencies involved in economic development activities will also continue.

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present and for the development of a sound policy for the future.

The second part of the paper deals with the question of the rights of the individual. It is shown that the rights of the individual are not absolute and that they must be balanced against the needs of the community. The author argues that the government has a duty to protect the rights of the individual, but that it must also be able to restrict those rights when necessary for the good of the community.

The third part of the paper discusses the question of the rights of the state. It is argued that the state has a duty to protect the rights of its citizens, but that it must also be able to restrict those rights when necessary for the good of the state. The author argues that the state has a duty to protect the rights of the individual, but that it must also be able to restrict those rights when necessary for the good of the state.

The fourth part of the paper discusses the question of the rights of the nation. It is argued that the nation has a duty to protect the rights of its citizens, but that it must also be able to restrict those rights when necessary for the good of the nation. The author argues that the nation has a duty to protect the rights of the individual, but that it must also be able to restrict those rights when necessary for the good of the nation.

The fifth part of the paper discusses the question of the rights of the world. It is argued that the world has a duty to protect the rights of its citizens, but that it must also be able to restrict those rights when necessary for the good of the world. The author argues that the world has a duty to protect the rights of the individual, but that it must also be able to restrict those rights when necessary for the good of the world.



6) Workshops--Co-sponsor with the chambers and other economic development agencies in southeastern Massachusetts workshops as necessary. The purpose of the workshops will be to inform local officials and others involved in economic development about new programs and timely issues.

Whenever possible the District will get involved in more general coordination/outreach activities which will lead to project development. The District staff will attend workshops and conferences aimed at industrial development commissions, chambers of commerce, local officials and others involved in economic development. The District will set up displays and provide handouts in order to familiarize workshop and conference attendees with the District's economic development activities and EDA programs.

b. Reports

The District will prepare those reports required by EDA as part of the planning grant agreement and also conduct studies, as noted below. This task will account for 20 percent of the total work effort.

1) Overall Economic Development Program--Prepare the annual progress report of the OEDP to maintain EDA eligibility as a District. As part of the OEDP, maintain a current analysis of economic trends and developments; and prepare a strategy to meet economic needs and concerns. The strategy consists of two aspects: a staff work program focusing on activities which will meet identified needs; and development of projects to improve the economic needs identified in the OEDP. Involve as many parties affected by the OEDP as possible in the process of developing the progress report.

The OEDP should be a dynamic process leading to the improvement of the economic climate of the entire region.

2) Semi-Annual Reports--Prepare two semi-annual reports to keep EDA abreast of ongoing activities and progress.

3) Fact Book--Update annual data in the fact book and revise industrial and commercial survey data according to new development. Preparation of the fact book was funded under the fiscal year 1980 grant. The purpose of the fact book is to provide developers with an overview of the region and its assets for economic development. The fact book, in effect, enables developers to focus in on specific communities which meet their needs. It provides detailed economic development information which is currently unavailable through other sources.

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The author argues that without reliable records, the system is vulnerable to manipulation and abuse.

2. The second part of the paper examines the various methods used to collect and analyze data. It compares different techniques, such as direct observation, interviews, and the use of statistical models. The author suggests that a combination of these methods is often the most effective way to gather comprehensive information. The text also discusses the challenges of data collection, such as ensuring the accuracy and reliability of the information gathered.

3. The third part of the paper focuses on the analysis of the collected data. It describes how the data is processed and interpreted to identify trends and patterns. The author highlights the importance of using appropriate statistical tools and techniques to ensure that the analysis is valid and meaningful. The text concludes by discussing the implications of the findings for policy-making and for the improvement of the financial system.

4) Newsletter--Continue to prepare an economic development section to the District newsletter. The purpose of the section is to keep industrial development commissions, chambers of commerce, local officials and others involved in economic development informed about the District's EDA program and current economic development activities.

5) Annual Reports--Prepare an annual report for the District to inform member cities and towns of District activities for the previous year.

6) Fact Sheets--Develop fact sheets and brochures on various issues and new programs as necessary to inform local communities.

c. Administration

Under administration fall such general activities as developing monthly work programs; maintenance of files; meetings of economic development staff and other District staff for coordination purposes. Major administration activities will account for 10 percent of the total work effort. They include:

1) Economic Development Committee--Continue to broaden present base as economic development needs and interests dictate; organize preparation of agenda, minutes, hand-outs and presentations.

2) Commission--Keep District Commission (official OEDP Committee) aware of recent happenings in economic development; report on Economic Development Committee actions and recommendations; review applications for economic development projects originating within the region (formerly under Office of Management and Budget Circular A-95); review industrial revenue bond applications under the Massachusetts Industrial Finance Agency program.

3) Requests for Information--Provide information on economic trends in the region and other statistical data as requested by developers, municipalities, community groups and individuals.

THE UNIVERSITY OF CHICAGO  
LIBRARY

1000 S. EAST ASIAN  
BUILDING

CHICAGO, ILL. 60607  
U.S.A.

TEL: 773-936-5000  
FAX: 773-936-5001

WWW.CHICAGO.EDU  
WWW.EASTASIAN.EDU

LIBRARY



# Bristol County, Mass., booms as industry seeks land, workers

By NORA LOCKWOOD TOOHER  
Journal-Bulletin Business Writer

Paul Segill, co-owner of American Lighting Fixture, was busy supervising his company's move into a new, \$1.8-million building in the Myles Standish Industrial Park in Taunton, Mass.

A manufacturer of decorative lighting fixtures, American Lighting outgrew its Arlington, Mass., plant several years ago, and "needed land to build," Segill recalls. In Arlington and other communities west of Boston, however, "There's very little land available, and what there is costs a fortune," he says. The company was also suffering from another problem: A shortage of skilled workers.

The Boston area, says Segill, is "lousy with high-tech industries" that have taken most of the area's workers. "We couldn't find them (workers), and what we could find was the bottom of the barrel."

American Lighting Fixture first investigated the Cabot, Cabot & Forbes Industrial Park in Mansfield, home of Augat, Codex Corp. and other big-league electrical and communications manufacturing companies, but found that there was little land left.

Looking farther south in Bristol County, the company followed Route 495 to the Myles Standish Industrial Park in the northwest corner of Taunton, where it built a 62,000-square-foot plant on an 8.6-acre site. To start up the new plant, American Lighting Fixture expects to hire 100 to 125 workers this year.

"When we first looked here several years ago, there was nothing here," recalls Segill. Since then, the 437-acre park has attracted notice as the future home of a \$21-million, 300,000-square-foot GTE plant that will make government communications equipment. Slated for groundbreaking this summer, the GTE plant is expected to create between 500 and 1,000 new jobs in the region.

From Mansfield in the north, south though Attleboro, Taunton and Fall River and east to New Bedford, Bristol County is booming with new construction and plant expansions as manufacturers respond to a range of economic incentives and slick marketing by state and local officials.

"Boston is saturated, (Route) 128 is saturated," says Paul L. Vigeant, director of Fall River's Office of Economic Development. "Those Massachusetts companies that are looking to expand are going to look south. People are realizing it's only a 40-mile drive from Boston, and more people are recognizing the advantage of commuting here or residing here," where housing prices are still below Boston-area prices.

The focal point of Bristol County's manufacturing growth is Taunton's Myles Standish Industrial Park. Started in 1978 with 360 acres of salable land deeded to the city by the state, the park was slow to take off, and until 1984, had only about eight facilities, according to William A. McAloon, executive director of Taunton's Industrial Development Commission. After the extension of Route 495 in 1982, however, marketing efforts began paying off in 1983 and 1984.

A total of 30 companies — 14 of them manufacturers — now occupy 27 plants, employing 1,440 people. Another 1,430 are expected to be added by year's end, according to McAloon. Only 40 acres are unsold. The park comprises a mix of distribution centers, warehouses, sales centers and manufacturers, including Kopin Corp., which makes high-performance compound semiconductor materials, American Lighting Fixture and Waters-Millipore Corp.'s Chromatography Division, a manufacturer of chemical compounds.

Taunton is filing legislation this year to obtain another 250 acres abutting the park, according to McAloon.

To spur development, Taunton has provided \$75 million in revenue bond financing in the past eight years. All efforts, McAloon says, have been coordinated with the mayor and the City Council to create the image of "a community that is receptive to industry."

Close behind the Myles Standish park's success is Airport Industrial Park, at Routes 24 and 79 in Fall River. Two major construction projects are currently under way there: a 55,000-square-foot addition to Aluminum Processing Corp.'s 260,000-square-foot plant, and a new \$11-million plant being built for American Dryer, a manufacturer of commercial and industrial dryers.

Officials in both Fall River and Taunton say the success of their industrial parks has had a spillover effect that is attracting interest in unsold industrial land in other sections of their cities. The \$200 million in private capital investment in the Myles Standish park has produced spinoff development of other industrial land on Routes 140 and 44 in Taunton, according to McAloon.

Owned and managed by a non-profit corporation, the Taunton Development Corporation, Myles Standish Industrial Park has "made a tremendous impact" on the city, McAloon says, reducing Taunton's unemployment from the teens to about 6 percent. With the completion of GTE's plant this year, unemployment in Taunton could fall below 4 percent, he predicts.

Companies in the Myles Standish Industrial Park alone are providing between \$1.5 million and \$2 million in new taxes to the City of Taunton, says McAloon.

The new manufacturing growth in Bristol County can't be lumped into one category, mainly because municipal and manufacturing leaders have worked to ensure diversity.

# THEORY OF THE EARTH

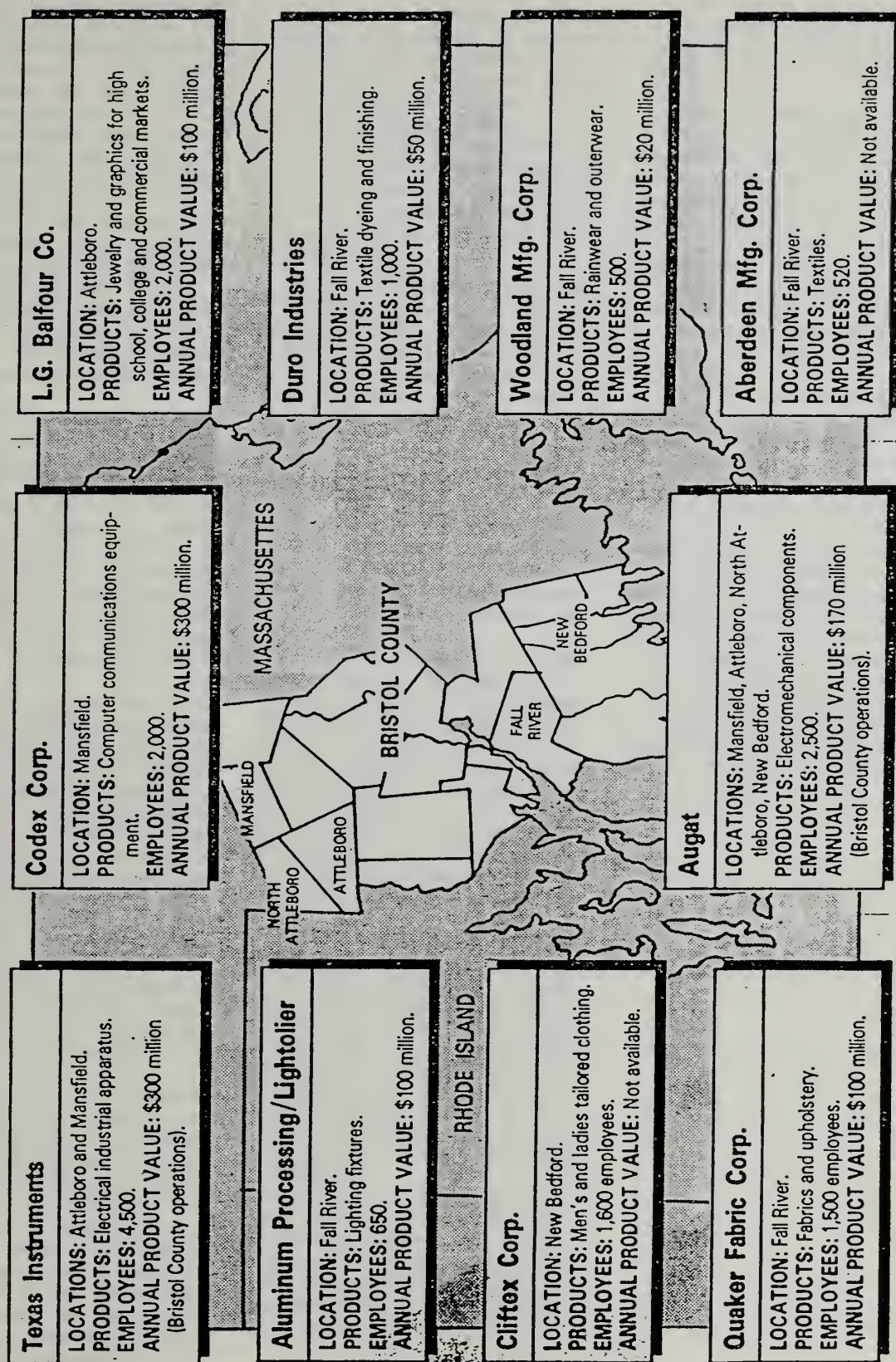
## AND ITS HISTORY

The theory of the earth and its history is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features, and to determine the sequence of events which have taken place since the earth was first formed. The theory of the earth and its history is based on the study of the earth's rocks and fossils, and on the principles of geology. It is a science which is constantly developing, as new discoveries are made and new theories are proposed. The theory of the earth and its history is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features, and to determine the sequence of events which have taken place since the earth was first formed. The theory of the earth and its history is based on the study of the earth's rocks and fossils, and on the principles of geology. It is a science which is constantly developing, as new discoveries are made and new theories are proposed.

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100



# Major employers in Bristol County, Mass.



— Journal-Bulletin Graphic by TOM MURPHY





Diversification, says Taunton's McAloon, is a lesson learned the hard way, after Raytheon Co.'s huge plant lost its defense contracts and shut down in 1972, leaving 1,600 people in the Taunton-Dighton area jobless.

As for Fall River, "We've always been concerned about putting all our eggs in one basket," says Mayor Carlton Viveiros.

Once known for its textile and apparel manufacturing in the waterfront cities of Fall River and New Bedford, Bristol County is being transformed into the center of modern manufacturing, with a range of diversified industries pumping millions into local economies.

In 1984, the most recent year for which figures are available, manufacturing employment in Bristol County totaled 72,076. That's down slightly from 72,553 in 1980, but represents a rebound of almost 3,000 jobs from a low of 68,960 in 1982, when a slump in the economy took a toll on the region's employment, according to Francis Cahill, senior labor economist for the state Department of Employment Security.

Employment figures reflect the county's manufacturing trends: Textile manufacturing fell from 7,246 in 1980 to 6,489 in 1984, and apparel manufacturing employment plunged from 18,019 in 1980 to 17,735 in 1984. Another loser is the category "miscellaneous manufacturing," mostly jewelry, down to 8,706 in 1984 from 10,331 in 1980.

Winners include non-electric machinery, mostly computers, with an increase in employment from 3,352 in 1980 to 3,618 in 1984. Employment in electric machinery manufacturing has also scored growth, from 7,150 in 1980 to 12,092 in 1984.

Fall River's efforts to promote new manufacturing began in the late 1970s. The city, says Vigeant, had been in a slump since a "general exodus" of textile and apparel industries after World War II, because of increased imports, relocations to the South and "sunset factors" as family-owned companies were sold off by heirs. City leaders responded with an aggressive campaign coordinated with manufacturing representatives.

Viveiros expanded Fall River's efforts into a regional road show, joining with mayors of Taunton, Attleboro and New Bedford in trips to California to promote Bristol County's "Golden Triangle" as a center for manufacturing.

In early 1983, state officials joined in, developing a strategy to help economically depressed regions of the state, including Bristol County, with extra help and financial incentives.

Spyro Mitrokostas, Southeast Massachusetts coordinator for the governor's Office of Economic Development, says efforts in the region have focused "primarily on industrial development," which is seen as the "most direct link with job creation."

"We took the approach," Mitrokostas says, "that if we could get companies to move into the region, or help companies there expand, we could create jobs and create new income for further expansion in commercial and residential development."

In Taunton, the state built sewers and a connector to Route 495 to help spur growth at Myles Standish Industrial Park. Almost all 30 companies in the park have used low-interest industrial development bonds through the state. And some, such as Kopin Corp., have used specially tailored financial incentives. Kopin received a \$500,000 low-interest loan through the Massachusetts economic development office.

In GTE's case, Taunton officials added their own incentives, and "gave them a terrific deal," essentially "eating \$300,000" by selling GTE the 50-acre site at early prices after the land value had increased. And Taunton officials, along with state Department of Employment Security offices, promised to find and train the estimated 500 to 1,000 workers GTE will need, according to Mitrokostas.

Like Taunton, Fall River has used a variety of economic development incentives to promote manufacturing in the city. There are currently 11 federal Urban Development Action Grants (UDAG) outstanding in Fall River, totaling about \$9.1 mil-

lion. Along with with \$38.7 million in private investments, the UDAG grants for new and expanded plants signal a surge in manufacturing growth.

Aluminum Processing Corp., a subsidiary of Lightolier, secured a \$1.5-million UDAG, and invested \$4 million this spring to finance the expansion of its Airport Park plant, already the size of six football fields. The addition is scheduled for completion in October.

Massachusetts officials are forecasting a 10 percent increase in jobs in Southeast Massachusetts over the next three years, according to Mitrokostas.

When the first shovel digs into GTE Corp.'s 50-acre site this summer, it will signal Bristol County's turnaround into a major manufacturing center in New England.

Myles Standish, says Mitrokostas, is the "gateway to Southeast Massachusetts." And state and local leaders intend to cash in on its success with a campaign aimed at persuading companies in the costly Route 128 area to "take advantage of lower land costs and lower labor costs" in Bristol County, he adds.

With GTE, says Fall River's Mayor Viveiros, "Taunton is the immediate beneficiary of things we've done collectively."





# Bristol County's new industrialists foresee 'spinoffs' and new horizons

By NORA LOCKWOOD TOOHER  
Journal-Bulletin Business Writer

*Glory days well they'll pass you by*

*Glory days in the wink of a young girl's eye*

*Glory days, glory days*

Bruce Springsteen

There's a new wave coming.

Silver and jewelry factories in the north, apparel and textile mills in the south: Talk with manufacturing leaders about what were once the glory industries of Bristol County, Mass., and the best they can muster is a few words of "cautious optimism" about the future of these industries.

Then talk with some of the manufacturers moving into Bristol County's gleaming, new industrial parks; and you hear other words, words like "horizons," and "spin-off" growth.

Glenn J. Walters,  
Advanced Dielectric Technologies:

Glenn J. Walters, 32, president of Advanced Dielectric Technologies, a supplier of specialized materials to high-tech industries, has a clear picture of the future of manufacturing growth in Bristol County.

A start-up company, Advanced Dielectric Technologies moved into a \$1-million, 10,000-square-foot plant in the Myles Standish Industrial Park in Taunton last December.

Walters believes the factors that drew his company here — available work force, highway access, central location — will bring other manufacturers to the Taunton area as well.

He sees the Route 495 area developing at a faster pace than Fall River-New Bedford, mainly because it is more centrally located, with highway access to Worcester and Route 95.

As the Taunton area becomes

more developed, however, and land prices rise, "There's always a spin-off," says Walters, "and people will begin looking at Fall River, and New Bedford in greater numbers."

When searching for a home, Advanced Dielectric considered about 40 communities within one hour of Boston, including Fall River. Walters, however, decided against Fall River because he wanted to remain as close as possible to Boston, home of most of the company's legal and accounting services.

"Like any process, industrial development has an evolutionary trend," says Walters. In Taunton's Myles Standish Industrial Park, for example, the first businesses were warehouse operations. Lured by lower building and land costs, "warehousing usually comes first" into emerging industrial areas, he says. "As an area becomes more developed and people begin to recognize the advantages of the area," he adds, the high-tech industries start to move in.

Over the next five years, predicts Walters, most of Bristol County's manufacturing growth will be in Taunton. Fall River and New Bedford may have an increase in warehousing operations, Walters says. But one problem with the Fall River-New Bedford area, he adds, is a missing ingredient considered vital for warehouse operations: "Centrality." Taunton, says Walters, occupies a unique central position in Southern Massachusetts that is probably the biggest factor in its growth.

Sinclair Weeks,  
Reed & Barton

A few miles from Walters' spunky new company is Reed & Barton, the 162-year-old Taunton maker of sterling silver and hollowware, where Sinclair Weeks Jr., chief executive officer, is bemoaning the effect of imports. "A lot of product is made in Europe

and the Far East," says Weeks.

Reed & Barton employs about 500 people in Taunton, and another 300 at factories in Norton. "When I first came here in 1961," says Weeks, "we had 1,000 in manufacturing (in Taunton), so manufacturing employment at our Taunton plant is down 50 percent."

The only solution, says Weeks, is to become more competitive. In manufacturing a product like silver flatware, however, which requires a "high labor content, that's difficult to do," he says.

"It's not easy to reduce costs," says Weeks, who thinks the best that mature industries can do is to "keep struggling, and make a good product, on time, with good service, and be as innovative as possible."

Aaron N. Mittleman,  
New England Apparel  
Manufacturers Association

In the downtown Fall River offices of the New England Apparel Manufacturers Association, Aaron N. Mittleman is echoing Weeks' complaints about the effects of imports.

Only 3 percent of apparel sales in 1960, imports represented about 50 percent of sales in 1985. The impact of those imports, says Mittleman, the association's president, has "reduced our factories and jobs" by about 50 percent in Fall River and New Bedford.

Mittleman led a revolt of Fall River apparel manufacturers who dumped Coke into the bay last September to protest the manufacture of Coca-Cola's casual line of clothing in the Far East through its clothing contractor, Murjani.

"I asked myself, 'How could the all-American company that makes the all-American drink make these clothes overseas?'" recalls Mittleman.

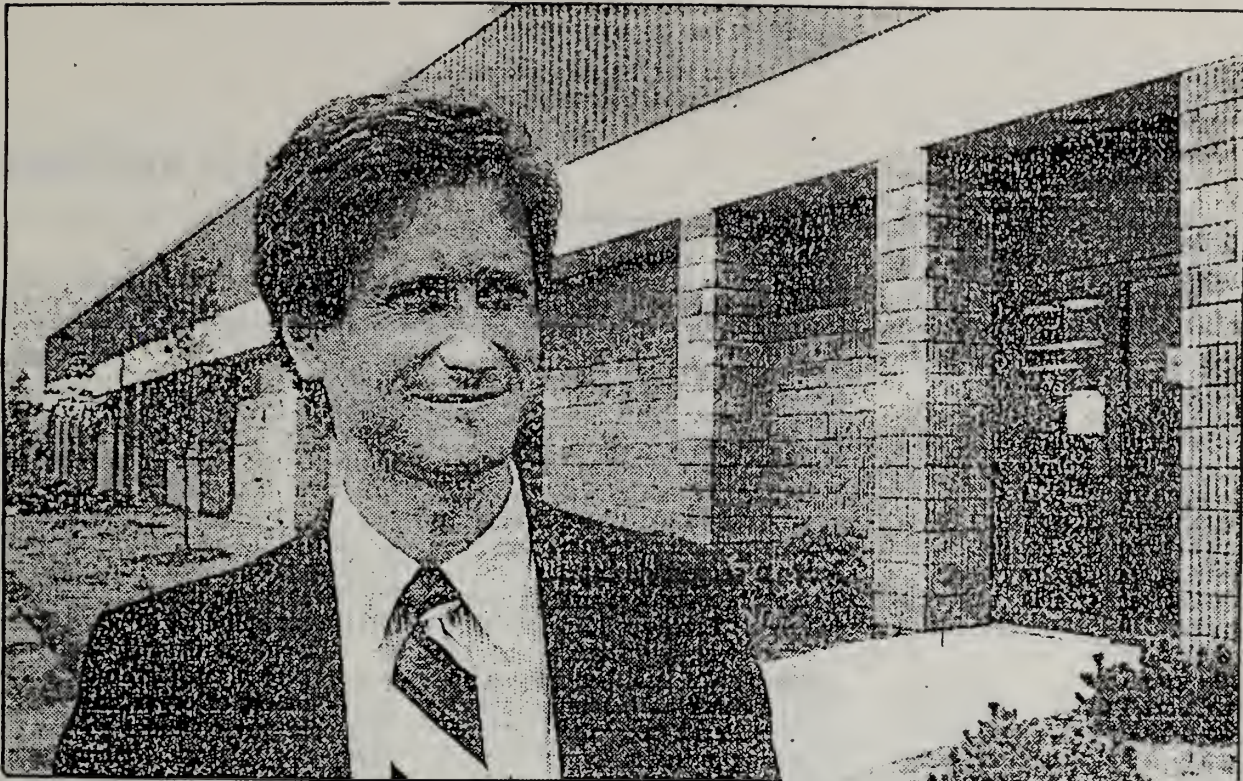
A contingent of Fall River officials, including Mayor Carlton Vi-

# THE JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

ORIGINAL ARTICLES	REVIEWS	NOTES
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]
[Faint text]	[Faint text]	[Faint text]

10  
11  
12  
13  
14  
15





—Journal-Bulletin Photo by WILLIAM B. ROONEY

**LOOKING AHEAD:** *Glenn J. Waters of Advanced Dielectric Technologies says Taunton's central location will continue to attract manufacturing firms.*

veiros, traveled to Murjani offices in New York last fall and to Coca-Cola headquarters in Atlanta to follow up the protest with efforts to bring the \$100-million Coca-Cola clothing to Fall River.

Nine months later, the mayor's office says the "partnership" with Coca-Cola is still alive. Mittleman, however, is convinced Fall River won't get any of the business. Murjani is now producing some of the Coke clothing in the United States, but in the South, not in Fall River and New Bedford.

Bringing apparel production "back home" is crucial to the future of the 50 apparel factories in Fall River and the 35 in New Bedford, according to Mittleman, who is hopeful that Congress will override President Reagan's veto of the Textile and Trade Enforcement Act of 1985.

With stores and manufacturers "coming home," says Mittleman, "fashion merchandise production will be back home" as well.

Before new apparel manufacturers move into Bristol County, however, Mittleman thinks, existing mills in Fall River and New Bedford will be expanded.

The apparel industry employs about 8,100 workers in each of the two cities, with annual payrolls totaling more than \$80 million.

Mittleman thinks the toughest times are over for the apparel industry in Bristol County. The owner of Cheryl Mfg. Corp, a Fall River maker of better women's sportswear, Mittleman says, "Those of us that have stayed here have survived."

Efforts to improve productivity and modernize plants are at the core of the apparel industry's future in Bristol County, he says. Mittleman says that, based on the economy of the country, which indicates continued disposable income for clothing, he is "cautiously optimistic" about the future of Bristol County's apparel industry.

**Richard M. Grubb,  
Augat**

With plants in Attleboro, North Attleboro and New Bedford, Augat, the Mansfield-based electronics manufacturer, has about two-thirds of its work force and an equal amount of its revenues coming out of Bristol County.

A mid-size, high-growth company, Augat has put the skids on expansion recently, but expects to open additional plants soon, according to Grubb, possibly in Bristol County.

The company, which also has facilities throughout the United States and overseas, expects to see other electronics companies moving into eastern Massachusetts, according to Richard M. Grubb, corporate senior vice president.

Areas establish reputations, and then attract companies based on those reputations: Rubber in Akron, Ohio, for example, and high-tech companies in California and in eastern Massachusetts, which is sometimes called "Silicon Valley East," Grubb says.

But while growth in the electronics industry is spilling south into Bristol County from the Route 128 area, it is also moving north "into New Hampshire and Vermont," says Grubb. Bristol County, he says, may end up competing for high-tech industries with northern New England.

*Glory days, glory days...*





## Population Growth

CITY/TOWN	1950	1960	1970	1980	% CHANGE 1950 TO 1980	AREA* SQ. MI.	POP./SQ. MILE 1980
ACUSHNET	4401	5755	7767	8704	97.77	19.09	456.04
ATTLEBORO	23809	27118	32907	34196	43.63	27.92	1224.84
BERKLEY	1285	1609	2027	2731	112.53	16.88	161.81
CARVER	1530	1949	2420	6988	356.73	42.98	162.61
DARTMOUTH	11115	14607	18800	23966	115.62	62.56	383.10
DIGHTON	2950	3769	4667	5352	81.42	22.27	240.34
FAIRHAVEN	12764	14339	16332	15759	23.46	12.36	1274.90
FALL RIVER	111963	99942	96898	92574	-17.32	38.22	2422.21
FREETOWN	2104	3039	4270	7058	235.46	35.11	201.01
LAKEVILLE	2066	3209	4376	5931	187.08	35.77	165.82
MANSFIELD	7184	7773	9939	13453	87.26	20.22	665.48
MARION	2250	2881	3466	3842	70.76	14.23	270.06
MATTAPOISETT	2265	3117	4500	5687	151.08	17.40	326.84
MIDDLEBOROUGH	10164	11065	13607	16404	61.39	72.53	226.17
NEW BEDFORD	109189	102477	101777	98478	-9.81	19.96	4932.76
N. ATTLEBOROUGH	12146	14777	18665	21095	73.68	19.67	1072.68
NORTON	4401	6818	9487	12690	188.34	29.02	437.33
PLAINVILLE	3000	3810	4953	5857	95.23	11.60	504.91
PLYMPTON	697	821	1224	1974	183.21	15.05	131.16
RAYNHAM	2426	4150	6705	9085	274.48	20.50	443.24
REHOBOTH	3700	4953	6512	7570	104.59	47.65	158.88
ROCHESTER	1328	1559	1770	3205	141.34	36.03	88.94
SEEKONK	6104	8399	11116	12269	101.00	18.89	649.53
SOMERSET	5866	12196	18088	18813	220.71	9.66	1948.27
SWANSEA	6129	9916	12640	15461	152.26	22.80	677.97
TAUNTON	40109	41132	43756	45001	12.20	46.23	973.46
WAREHAM	7569	9461	11492	18457	143.85	37.10	497.47
WESTPORT	4990	6641	9791	13763	175.81	57.87	237.83
DISTRICT TOTAL	403504	427282	479952	526363	30.45	829.54	634.53
BRISTOL COUNTY	--	398488	444301	474641	--	575.62	824.57
PLYMOUTH COUNTY	--	248449	333314	405437	--	687.88	589.41
MASSACHUSETTS	4690514	5148578	5689170	5737037	22.31	8123.83	706.20

SOURCE: 1950, 1960, 1970, & 1980 U.S. CENSUS OF POPULATION.

\* AREA INCLUDES OPEN WATER.



## Population Projections

CITY/TOWN	1980	1985	1990	1995	1980-1995 % CHANGE
ACUSHNET	8704	8881	9081	9334	7.24
ATTLEBORO	34196	34085	35203	36218	5.91
BERKLEY	2731	3182	3259	3324	21.71
CARVER	6988	9069	9898	10875	55.62
DARTMOUTH	23966	24947	25646	26345	9.93
DIGHTON	5352	5374	5514	5646	5.49
FAIRHAVEN	15759	15770	16317	16861	6.99
FALL RIVER	92574	92560	94926	96897	4.67
FREETOWN	7058	7467	7698	7923	12.26
LAKEVILLE	5931	6598	7193	7847	32.30
MANSFIELD	13453	14175	14550	14833	10.26
MARION	3842	4175	4747	5417	40.99
MATTAPOISETT	5687	5825	6436	7088	24.64
MIDDLEBOROUGH	16404	17432	19103	20863	27.18
NEW BEDFORD	98478	98900	104428	109630	11.32
NO. ATTLEBOROUGH	21095	21894	22503	23031	9.18
NORTON	12690	13225	13514	13651	7.57
PLAINVILLE	5857	6174	6160	6101	4.17
PLYMPTON	1974	2162	2347	2554	29.38
RAYNHAM	9085	9241	9486	9761	7.44
REHOBOTH	7570	7879	8072	8304	9.70
ROCHESTER	3205	3574	3904	4302	34.23
SEEKONK	12269	12401	12766	13193	7.53
SOMERSET	18813	18274	18777	19370	2.96
SWANSEA	15461	15518	15899	16362	5.83
TAUNTON	45001	45739	47221	48378	7.50
WAREHAM	18457	19767	22532	25629	38.86
WESTPORT	13763	13945	14319	14680	6.66
DISTRICT TOTAL	526363	538233	561499	584417	11.03

SOURCE: 1980 U.S. CENSUS OF POPULATION AND PROVISIONAL PROJECTIONS: 1985, 1990, AND 1995: CITIES AND TOWN IN MASSACHUSETTS BY THE MASS. INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH, AMHERST, MASS., JUNE 1986.

1870		1871		1872	
Jan	1	Jan	1	Jan	1
Feb	2	Feb	2	Feb	2
Mar	3	Mar	3	Mar	3
Apr	4	Apr	4	Apr	4
May	5	May	5	May	5
Jun	6	Jun	6	Jun	6
Jul	7	Jul	7	Jul	7
Aug	8	Aug	8	Aug	8
Sep	9	Sep	9	Sep	9
Oct	10	Oct	10	Oct	10
Nov	11	Nov	11	Nov	11
Dec	12	Dec	12	Dec	12
Jan	13	Jan	13	Jan	13
Feb	14	Feb	14	Feb	14
Mar	15	Mar	15	Mar	15
Apr	16	Apr	16	Apr	16
May	17	May	17	May	17
Jun	18	Jun	18	Jun	18
Jul	19	Jul	19	Jul	19
Aug	20	Aug	20	Aug	20
Sep	21	Sep	21	Sep	21
Oct	22	Oct	22	Oct	22
Nov	23	Nov	23	Nov	23
Dec	24	Dec	24	Dec	24
Jan	25	Jan	25	Jan	25
Feb	26	Feb	26	Feb	26
Mar	27	Mar	27	Mar	27
Apr	28	Apr	28	Apr	28
May	29	May	29	May	29
Jun	30	Jun	30	Jun	30
Jul	31	Jul	31	Jul	31
Aug	32	Aug	32	Aug	32
Sep	33	Sep	33	Sep	33
Oct	34	Oct	34	Oct	34
Nov	35	Nov	35	Nov	35
Dec	36	Dec	36	Dec	36
Jan	37	Jan	37	Jan	37
Feb	38	Feb	38	Feb	38
Mar	39	Mar	39	Mar	39
Apr	40	Apr	40	Apr	40
May	41	May	41	May	41
Jun	42	Jun	42	Jun	42
Jul	43	Jul	43	Jul	43
Aug	44	Aug	44	Aug	44
Sep	45	Sep	45	Sep	45
Oct	46	Oct	46	Oct	46
Nov	47	Nov	47	Nov	47
Dec	48	Dec	48	Dec	48
Jan	49	Jan	49	Jan	49
Feb	50	Feb	50	Feb	50
Mar	51	Mar	51	Mar	51
Apr	52	Apr	52	Apr	52
May	53	May	53	May	53
Jun	54	Jun	54	Jun	54
Jul	55	Jul	55	Jul	55
Aug	56	Aug	56	Aug	56
Sep	57	Sep	57	Sep	57
Oct	58	Oct	58	Oct	58
Nov	59	Nov	59	Nov	59
Dec	60	Dec	60	Dec	60
Jan	61	Jan	61	Jan	61
Feb	62	Feb	62	Feb	62
Mar	63	Mar	63	Mar	63
Apr	64	Apr	64	Apr	64
May	65	May	65	May	65
Jun	66	Jun	66	Jun	66
Jul	67	Jul	67	Jul	67
Aug	68	Aug	68	Aug	68
Sep	69	Sep	69	Sep	69
Oct	70	Oct	70	Oct	70
Nov	71	Nov	71	Nov	71
Dec	72	Dec	72	Dec	72
Jan	73	Jan	73	Jan	73
Feb	74	Feb	74	Feb	74
Mar	75	Mar	75	Mar	75
Apr	76	Apr	76	Apr	76
May	77	May	77	May	77
Jun	78	Jun	78	Jun	78
Jul	79	Jul	79	Jul	79
Aug	80	Aug	80	Aug	80
Sep	81	Sep	81	Sep	81
Oct	82	Oct	82	Oct	82
Nov	83	Nov	83	Nov	83
Dec	84	Dec	84	Dec	84
Jan	85	Jan	85	Jan	85
Feb	86	Feb	86	Feb	86
Mar	87	Mar	87	Mar	87
Apr	88	Apr	88	Apr	88
May	89	May	89	May	89
Jun	90	Jun	90	Jun	90
Jul	91	Jul	91	Jul	91
Aug	92	Aug	92	Aug	92
Sep	93	Sep	93	Sep	93
Oct	94	Oct	94	Oct	94
Nov	95	Nov	95	Nov	95
Dec	96	Dec	96	Dec	96
Jan	97	Jan	97	Jan	97
Feb	98	Feb	98	Feb	98
Mar	99	Mar	99	Mar	99
Apr	100	Apr	100	Apr	100
May	101	May	101	May	101
Jun	102	Jun	102	Jun	102
Jul	103	Jul	103	Jul	103
Aug	104	Aug	104	Aug	104
Sep	105	Sep	105	Sep	105
Oct	106	Oct	106	Oct	106
Nov	107	Nov	107	Nov	107
Dec	108	Dec	108	Dec	108
Jan	109	Jan	109	Jan	109
Feb	110	Feb	110	Feb	110
Mar	111	Mar	111	Mar	111
Apr	112	Apr	112	Apr	112
May	113	May	113	May	113
Jun	114	Jun	114	Jun	114
Jul	115	Jul	115	Jul	115
Aug	116	Aug	116	Aug	116
Sep	117	Sep	117	Sep	117
Oct	118	Oct	118	Oct	118
Nov	119	Nov	119	Nov	119
Dec	120	Dec	120	Dec	120
Jan	121	Jan	121	Jan	121
Feb	122	Feb	122	Feb	122
Mar	123	Mar	123	Mar	123
Apr	124	Apr	124	Apr	124
May	125	May	125	May	125
Jun	126	Jun	126	Jun	126
Jul	127	Jul	127	Jul	127
Aug	128	Aug	128	Aug	128
Sep	129	Sep	129	Sep	129
Oct	130	Oct	130	Oct	130
Nov	131	Nov	131	Nov	131
Dec	132	Dec	132	Dec	132
Jan	133	Jan	133	Jan	133
Feb	134	Feb	134	Feb	134
Mar	135	Mar	135	Mar	135
Apr	136	Apr	136	Apr	136
May	137	May	137	May	137
Jun	138	Jun	138	Jun	138
Jul	139	Jul	139	Jul	139
Aug	140	Aug	140	Aug	140
Sep	141	Sep	141	Sep	141
Oct	142	Oct	142	Oct	142
Nov	143	Nov	143	Nov	143
Dec	144	Dec	144	Dec	144
Jan	145	Jan	145	Jan	145
Feb	146	Feb	146	Feb	146
Mar	147	Mar	147	Mar	147
Apr	148	Apr	148	Apr	148
May	149	May	149	May	149
Jun	150	Jun	150	Jun	150
Jul	151	Jul	151	Jul	151
Aug	152	Aug	152	Aug	152
Sep	153	Sep	153	Sep	153
Oct	154	Oct	154	Oct	154
Nov	155	Nov	155	Nov	155
Dec	156	Dec	156	Dec	156
Jan	157	Jan	157	Jan	157
Feb	158	Feb	158	Feb	158
Mar	159	Mar	159	Mar	159
Apr	160	Apr	160	Apr	160
May	161	May	161	May	161
Jun	162	Jun	162	Jun	162
Jul	163	Jul	163	Jul	163
Aug	164	Aug	164	Aug	164
Sep	165	Sep	165	Sep	165
Oct	166	Oct	166	Oct	166
Nov	167	Nov	167	Nov	167
Dec	168	Dec	168	Dec	168
Jan	169	Jan	169	Jan	169
Feb	170	Feb	170	Feb	170
Mar	171	Mar	171	Mar	171
Apr	172	Apr	172	Apr	172
May	173	May	173	May	173
Jun	174	Jun	174	Jun	174
Jul	175	Jul	175	Jul	175
Aug	176	Aug	176	Aug	176
Sep	177	Sep	177	Sep	177
Oct	178	Oct	178	Oct	178
Nov	179	Nov	179	Nov	179
Dec	180	Dec	180	Dec	180
Jan	181	Jan	181	Jan	181
Feb	182	Feb	182	Feb	182
Mar	183	Mar	183	Mar	183
Apr	184	Apr	184	Apr	184
May	185	May	185	May	185
Jun	186	Jun	186	Jun	186
Jul	187	Jul	187	Jul	187
Aug	188	Aug	188	Aug	188
Sep	189	Sep	189	Sep	189
Oct	190	Oct	190	Oct	190
Nov	191	Nov	191	Nov	191
Dec	192	Dec	192	Dec	192
Jan	193	Jan	193	Jan	193
Feb	194	Feb	194	Feb	194
Mar	195	Mar	195	Mar	195
Apr	196	Apr	196	Apr	196
May	197	May	197	May	197
Jun	198	Jun	198	Jun	198
Jul	199	Jul	199	Jul	199
Aug	200	Aug	200	Aug	200
Sep	201	Sep	201	Sep	201
Oct	202	Oct	202	Oct	202
Nov	203	Nov	203	Nov	203
Dec	204	Dec	204	Dec	204
Jan	205	Jan	205	Jan	205
Feb	206	Feb	206	Feb	206
Mar	207	Mar	207	Mar	207
Apr	208	Apr	208	Apr	208
May	209	May	209	May	209
Jun	210	Jun	210	Jun	210
Jul	211	Jul	211	Jul	211
Aug	212	Aug	212	Aug	212
Sep	213	Sep	213	Sep	213
Oct	214	Oct	214	Oct	214
Nov	215	Nov	215	Nov	215
Dec	216	Dec	216	Dec	216
Jan	217	Jan	217	Jan	217
Feb	218	Feb	218	Feb	218
Mar	219	Mar	219	Mar	219
Apr	220	Apr	220	Apr	220
May	221	May	221	May	221
Jun	222	Jun	222	Jun	222
Jul	223	Jul	223	Jul	223
Aug	224	Aug	224	Aug	224
Sep	225	Sep	225	Sep	225
Oct	226	Oct	226	Oct	226
Nov	227	Nov	227	Nov	227
Dec	228	Dec	228	Dec	228
Jan	229	Jan	229	Jan	229
Feb	230	Feb	230	Feb	230
Mar	231	Mar	231	Mar	231
Apr	232	Apr	232	Apr	232
May	233	May	233	May	233
Jun	234	Jun	234	Jun	234
Jul	235	Jul	235	Jul	235
Aug	236	Aug	236	Aug	236
Sep	237	Sep	237	Sep	237
Oct	238	Oct	238	Oct	238
Nov	239	Nov	239	Nov	239
Dec	240	Dec	240	Dec	240
Jan	241	Jan	241	Jan	241
Feb	242	Feb	242	Feb	242
Mar	243	Mar	243	Mar	243
Apr	244	Apr	244	Apr	244
May	245	May	245	May	245
Jun	246	Jun	246	Jun	246
Jul	247	Jul	247	Jul	247
Aug	248	Aug	248	Aug	248
Sep	249	Sep	249	Sep	249
Oct	250	Oct	250	Oct	250
Nov	251	Nov	251	Nov	251
Dec	252	Dec	252	Dec	252
Jan	253	Jan	253	Jan	253
Feb	254	Feb	254	Feb	254
Mar	255	Mar	255	Mar	255
Apr	256	Apr	256	Apr	256
May	257	May	257	May	257
Jun	258	Jun	258	Jun	258
Jul	259	Jul	259	Jul	259
Aug	260	Aug	260	Aug	260
Sep	261	Sep	261	Sep	261
Oct	262	Oct	262	Oct	262
Nov	263	Nov	263	Nov	263
Dec	264	Dec	264	Dec	264
Jan	265	Jan	265	Jan	265
Feb	266	Feb	266	Feb	266
Mar	267	Mar	267	Mar	267
Apr	268	Apr	268	Apr	268
May	269	May	269	May	269
Jun	270	Jun	270	Jun	270
Jul	271	Jul	271	Jul	271
Aug	272	Aug	272	Aug	272
Sep	273	Sep	273	Sep	27

appendix

111  
112

113  
114  
115

116  
117

spiral binding



## Education

CITY/TOWN	MEDIAN SCHOOL YEARS COMPLETED		% COMPLETED HIGH SCHOOL*		% COMPLETED 4+ YRS COLLEGE*	
	1970	1980	1970	1980	1970	1980
ACUSHNET	10.2	12.1	36.7	52	3	7
ATTLEBORO	11.8	12.4	49.4	63.5	7.8	12.9
BERKLEY	10.6	12.4	46.5	67.2	3.2	12
CARVER	10.1	12.5	41.8	77.9	3.8	10.2
DARTMOUTH	11.1	12.3	44.5	58.9	10.4	18.6
DIGHTON	12.1	12.5	52.4	69.2	8.7	11.2
FAIRHAVEN	10.8	12.2	40.1	56.8	6	8.3
FALL RIVER	8.8	9.3	25.6	35.3	4.3	6.7
FREETOWN	11.3	12.5	45	66.8	4.5	13.5
LAKEVILLE	12	12.6	49.7	74	7	15.9
MANSFIELD	12.3	12.7	63.5	79.6	9.6	18.3
MARION	12.6	13	66.7	80.6	21.1	30.3
MATTAPOISETT	12.6	12.9	70.8	78.2	18.3	28.7
MIDDLEBOROUGH	11.9	12.4	51.1	69.5	6.7	11.8
NEW BEDFORD	8.8	9.5	27.8	38.1	3.7	6.2
N. ATTLEBOROUGH	12.1	12.5	54.4	71.6	9.3	15.5
NORTON	12.1	12.6	52	73	9.9	17
PLAINVILLE	12.3	12.6	59.2	74.7	8	15.6
PLYMPTON	11.6	12.8	66.8	84.5	18.3	20.4
RAYNHAM	12.3	12.6	61.9	75.2	11.2	17.2
REHOBOTH	12.1	12.6	55.5	73.9	8.6	17.2
ROCHESTER	10.4	12.5	44.9	70.2	6.5	15.3
SEEKONK	12.1	12.6	53	70	9.6	18.2
SOMERSET	11.8	12.3	48.6	59.2	9.3	12.3
SWANSEA	11.5	12.4	45.9	61.7	5.7	14
TAUNTON	10.7	12	41.1	51.4	5	8
WAREHAM	11.8	12.3	49	64.5	6.1	9.7
WESTPORT	10.4	12.2	36.9	57.3	5.4	14.9
BRISTOL COUNTY	10.3	12.1	38.1	52.6	6	10.8
PLYMOUTH COUNTY	12.4	12.7	62.9	77.1	11.4	17.6
MASSACHUSETTS	12.2	12.6	34.9	72.1	12.6	20

\* PEOPLE IN COMMUNITY 25 YRS AND OVER.

SOURCE: 1970 & 1980 U.S. CENSUS OF POPULATION.

Date	Particulars	Debit	Credit	Balance
1890				
Jan 1	Balance forward			100.00
Jan 15	By Cash	50.00		150.00
Jan 20	To Cash		25.00	125.00
Jan 25	By Cash	75.00		200.00
Jan 30	To Cash		100.00	100.00
Feb 5	By Cash	100.00		200.00
Feb 10	To Cash		50.00	150.00
Feb 15	By Cash	25.00		175.00
Feb 20	To Cash		75.00	100.00
Feb 25	By Cash	50.00		150.00
Feb 28	To Cash		100.00	50.00
Mar 5	By Cash	25.00		75.00
Mar 10	To Cash		50.00	25.00
Mar 15	By Cash	50.00		75.00
Mar 20	To Cash		25.00	50.00
Mar 25	By Cash	25.00		75.00
Mar 30	To Cash		50.00	25.00
Apr 5	By Cash	50.00		75.00
Apr 10	To Cash		25.00	50.00
Apr 15	By Cash	25.00		75.00
Apr 20	To Cash		50.00	25.00
Apr 25	By Cash	50.00		75.00
Apr 30	To Cash		25.00	50.00
May 5	By Cash	25.00		75.00
May 10	To Cash		50.00	25.00
May 15	By Cash	50.00		75.00
May 20	To Cash		25.00	50.00
May 25	By Cash	25.00		75.00
May 30	To Cash		50.00	25.00
Jun 5	By Cash	50.00		75.00
Jun 10	To Cash		25.00	50.00
Jun 15	By Cash	25.00		75.00
Jun 20	To Cash		50.00	25.00
Jun 25	By Cash	50.00		75.00
Jun 30	To Cash		25.00	50.00
Jul 5	By Cash	25.00		75.00
Jul 10	To Cash		50.00	25.00
Jul 15	By Cash	50.00		75.00
Jul 20	To Cash		25.00	50.00
Jul 25	By Cash	25.00		75.00
Jul 30	To Cash		50.00	25.00
Aug 5	By Cash	50.00		75.00
Aug 10	To Cash		25.00	50.00
Aug 15	By Cash	25.00		75.00
Aug 20	To Cash		50.00	25.00
Aug 25	By Cash	50.00		75.00
Aug 30	To Cash		25.00	50.00
Sep 5	By Cash	25.00		75.00
Sep 10	To Cash		50.00	25.00
Sep 15	By Cash	50.00		75.00
Sep 20	To Cash		25.00	50.00
Sep 25	By Cash	25.00		75.00
Sep 30	To Cash		50.00	25.00
Oct 5	By Cash	50.00		75.00
Oct 10	To Cash		25.00	50.00
Oct 15	By Cash	25.00		75.00
Oct 20	To Cash		50.00	25.00
Oct 25	By Cash	50.00		75.00
Oct 30	To Cash		25.00	50.00
Nov 5	By Cash	25.00		75.00
Nov 10	To Cash		50.00	25.00
Nov 15	By Cash	50.00		75.00
Nov 20	To Cash		25.00	50.00
Nov 25	By Cash	25.00		75.00
Nov 30	To Cash		50.00	25.00
Dec 5	By Cash	50.00		75.00
Dec 10	To Cash		25.00	50.00
Dec 15	By Cash	25.00		75.00
Dec 20	To Cash		50.00	25.00
Dec 25	By Cash	50.00		75.00
Dec 30	To Cash		25.00	50.00
Total		2400.00	2400.00	

1890  
Jan 1  
Jan 15  
Jan 20  
Jan 25  
Jan 30  
Feb 5  
Feb 10  
Feb 15  
Feb 20  
Feb 25  
Feb 28  
Mar 5  
Mar 10  
Mar 15  
Mar 20  
Mar 25  
Mar 30  
Apr 5  
Apr 10  
Apr 15  
Apr 20  
Apr 25  
Apr 30  
May 5  
May 10  
May 15  
May 20  
May 25  
May 30  
Jun 5  
Jun 10  
Jun 15  
Jun 20  
Jun 25  
Jun 30  
Jul 5  
Jul 10  
Jul 15  
Jul 20  
Jul 25  
Jul 30  
Aug 5  
Aug 10  
Aug 15  
Aug 20  
Aug 25  
Aug 30  
Sep 5  
Sep 10  
Sep 15  
Sep 20  
Sep 25  
Sep 30  
Oct 5  
Oct 10  
Oct 15  
Oct 20  
Oct 25  
Oct 30  
Nov 5  
Nov 10  
Nov 15  
Nov 20  
Nov 25  
Nov 30  
Dec 5  
Dec 10  
Dec 15  
Dec 20  
Dec 25  
Dec 30

# Income

CITY/TOWN	---PER CAPITA INCOME---			AVERAGE FAMILY INCOME		MED. FAM. INCOME	% PERSONS BELOW POVERTY LEVEL*	
	1975	1977	1979	1970	1980	1980	1970	1980
ASHNET	3891	4674	6332	9868	20520	19059	7.80	5.80
ATTLEBORO	4739	5618	7081	10904	20157	20459	6.20	7.00
BARKLEY	4160	4986	6306	11017	20272	19638	11.10	6.90
BARKER	3522	4089	5984	9619	19303	19348	12.80	6.40
BARTMOUTH	4937	5824	6955	10179	20748	19820	9.50	6.40
BRIGHTON	4797	5616	6838	12132	23331	21548	6.40	5.20
BIRHAVEN	4452	5262	6390	9649	17441	17794	7.10	6.70
BILL RIVER	3795	4403	5197	8289	13666	14810	13.80	14.80
BREETOWN	4460	5271	6419	10779	21819	21085	8.60	7.40
BKEVILLE	4761	5670	6603	12114	22081	21067	7.20	8.50
BNSFIELD	4732	5525	7287	11648	21461	23348	6.50	5.30
BRION	5268	6092	9371	13300	27466	22485	8.90	7.50
BTTAPOISETT	5075	5905	7975	11647	25508	23430	7.70	5.40
BIDDLEBOROUGH	4134	4741	5738	9638	17298	18247	7.70	11.60
BW BEDFORD	3922	4604	5431	8230	14112	14930	15.30	16.20
B ATTLEBOROUGH	4676	5579	7352	11112	21075	22128	6.00	5.60
BRTON	4034	4816	6307	11497	20788	21346	8.60	6.20
BAINVILLE	4679	5604	7713	11357	24733	21736	6.40	4.90
BYMPTON	4747	5502	6736	11315	23165	21424	11.90	7.20
BRYNHAM	4985	5883	7409	13226	25099	23622	3.10	5.30
BHOBOTH	4563	5565	7824	11549	25930	22418	5.80	6.00
BHESTER	4594	5313	6795	10793	22137	20625	6.40	8.90
BSEKONK	5118	6090	7688	11248	23728	23615	5.10	3.40
BSEMERSET	4685	5530	7145	10801	21208	21248	5.20	3.90
BANSEA	4219	4983	6692	10277	20703	20318	6.50	4.00
BUNTUN	3987	4711	6161	9957	17464	18675	9.60	10.50
BREHAM	3982	4504	5943	8998	15924	15442	12.80	12.00
BSTPORT	4183	4910	6549	10163	19786	19394	8.40	6.30
BTRICT AVERAGE	4468	5260	6794	--	--	--	--	--
BISTOL COUNTY	--	--	6252	10319	20235	18334	10.50	10.10
BYMOUTH COUNTY	--	--	6978	12143	23614	21317	7.10	8.00
BSSACHUSETTS	--	--	7458	12283	24105	21166	8.60	9.60

POVERTY LEVEL FOR AN INDIVIDUAL IN 1970 WAS \$1,840, IN 1980 IT WAS \$3,686. NO FIGURES ARE ADJUSTED FOR INFLATION.

SOURCE: 1970 & 1980 U.S. CENSUS OF POPULATION.

185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919  
920  
921  
922  
923  
924  
925  
926  
927  
928  
929  
930  
931  
932  
933  
934  
935  
936  
937  
938  
939  
940  
941  
942  
943  
944  
945  
946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990  
991  
992  
993  
994  
995  
996  
997  
998  
999  
1000

Table 1: Summary of Data									
Year	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
2010	100	120	110	130	140	150	160	170	180
2011	110	130	120	140	150	160	170	180	190
2012	120	140	130	150	160	170	180	190	200
2013	130	150	140	160	170	180	190	200	210
2014	140	160	150	170	180	190	200	210	220
2015	150	170	160	180	190	200	210	220	230
2016	160	180	170	190	200	210	220	230	240
2017	170	190	180	200	210	220	230	240	250
2018	180	200	190	210	220	230	240	250	260
2019	190	210	200	220	230	240	250	260	270
2020	200	220	210	230	240	250	260	270	280
2021	210	230	220	240	250	260	270	280	290
2022	220	240	230	250	260	270	280	290	300
2023	230	250	240	260	270	280	290	300	310
2024	240	260	250	270	280	290	300	310	320
2025	250	270	260	280	290	300	310	320	330
2026	260	280	270	290	300	310	320	330	340
2027	270	290	280	300	310	320	330	340	350
2028	280	300	290	310	320	330	340	350	360
2029	290	310	300	320	330	340	350	360	370
2030	300	320	310	330	340	350	360	370	380
2031	310	330	320	340	350	360	370	380	390
2032	320	340	330	350	360	370	380	390	400
2033	330	350	340	360	370	380	390	400	410
2034	340	360	350	370	380	390	400	410	420
2035	350	370	360	380	390	400	410	420	430
2036	360	380	370	390	400	410	420	430	440
2037	370	390	380	400	410	420	430	440	450
2038	380	400	390	410	420	430	440	450	460
2039	390	410	400	420	430	440	450	460	470
2040	400	420	410	430	440	450	460	470	480
2041	410	430	420	440	450	460	470	480	490
2042	420	440	430	450	460	470	480	490	500
2043	430	450	440	460	470	480	490	500	510
2044	440	460	450	470	480	490	500	510	520
2045	450	470	460	480	490	500	510	520	530
2046	460	480	470	490	500	510	520	530	540
2047	470	490	480	500	510	520	530	540	550
2048	480	500	490	510	520	530	540	550	560
2049	490	510	500	520	530	540	550	560	570
2050	500	520	510	530	540	550	560	570	580
2051	510	530	520	540	550	560	570	580	590
2052	520	540	530	550	560	570	580	590	600
2053	530	550	540	560	570	580	590	600	610
2054	540	560	550	570	580	590	600	610	620
2055	550	570	560	580	590	600	610	620	630
2056	560	580	570	590	600	610	620	630	640
2057	570	590	580	600	610	620	630	640	650
2058	580	600	590	610	620	630	640	650	660
2059	590	610	600	620	630	640	650	660	670
2060	600	620	610	630	640	650	660	670	680
2061	610	630	620	640	650	660	670	680	690
2062	620	640	630	650	660	670	680	690	700
2063	630	650	640	660	670	680	690	700	710
2064	640	660	650	670	680	690	700	710	720
2065	650	670	660	680	690	700	710	720	730
2066	660	680	670	690	700	710	720	730	740
2067	670	690	680	700	710	720	730	740	750
2068	680	700	690	710	720	730	740	750	760
2069	690	710	700	720	730	740	750	760	770
2070	700	720	710	730	740	750	760	770	780
2071	710	730	720	740	750	760	770	780	790
2072	720	740	730	750	760	770	780	790	800
2073	730	750	740	760	770	780	790	800	810
2074	740	760	750	770	780	790	800	810	820
2075	750	770	760	780	790	800	810	820	830
2076	760	780	770	790	800	810	820	830	840
2077	770	790	780	800	810	820	830	840	850
2078	780	800	790	810	820	830	840	850	860
2079	790	810	800	820	830	840	850	860	870
2080	800	820	810	830	840	850	860	870	880
2081	810	830	820	840	850	860	870	880	890
2082	820	840	830	850	860	870	880	890	900
2083	830	850	840	860	870	880	890	900	910
2084	840	860	850	870	880	890	900	910	920
2085	850	870	860	880	890	900	910	920	930
2086	860	880	870	890	900	910	920	930	940
2087	870	890	880	900	910	920	930	940	950
2088	880	900	890	910	920	930	940	950	960
2089	890	910	900	920	930	940	950	960	970
2090	900	920	910	930	940	950	960	970	980
2091	910	930	920	940	950	960	970	980	990
2092	920	940	930	950	960	970	980	990	1000
2093	930	950	940	960	970	980	990	1000	1010
2094	940	960	950	970	980	990	1000	1010	1020
2095	950	970	960	980	990	1000	1010	1020	1030
2096	960	980	970	990	1000	1010	1020	1030	1040
2097	970	990	980	1000	1010	1020	1030	1040	1050
2098	980	1000	990	1010	1020	1030	1040	1050	1060
2099	990	1010	1000	1020	1030	1040	1050	1060	1070
2100	1000	1020	1010	1030	1040	1050	1060	1070	1080
2101	1010	1030	1020	1040	1050	1060	1070	1080	1090
2102	1020	1040	1030	1050	1060	1070	1080	1090	1100
2103	1030	1050	1040	1060	1070	1080	10		

## Housing Units, Units in a Structure

CITY/TOWN	SINGLE FAMILY		MULTI FAMILY		TOTAL		% CHANGE
	1970	1980	1970	1980	1970	1980	
ACUSHNET	1824	2314	528	738	2352	3052	29.76
ATTLEBORO	5784	7068	4633	5433	10417	12501	20.01
BERKLEY	484	769	126	95	610	864	41.64
CARVER	711	1971	54	306	765	2277	197.65
DARTMOUTH	5140	6912	927	1161	6067	8073	33.06
DIGHTON	1063	1424	335	344	1398	1768	26.47
FAIRHAVEN	3938	4358	1345	1567	5283	5925	12.15
FALL RIVER	6130	8381	28013	28623	34143	37004	8.38
FREETOWN	1098	2027	138	202	1236	2229	80.34
LAKEVILLE	1290	1894	28	86	1318	1980	50.23
MANSFIELD	2179	3111	868	1587	3047	4698	54.18
MARION	1038	1370	100	107	1138	1477	29.79
MATTAPOISETT	1252	1785	217	262	1469	2047	39.35
MIDDLEBOROUGH	2805	3751	1500	1874	4305	5625	30.66
NEW BEDFORD	10740	15949	25828	23533	36568	39482	7.97
N. ATTLEBOROUGH	3599	4660	2389	2917	5988	7577	26.54
NORTON	2086	2998	406	810	2492	3808	52.81
PLAINVILLE	1055	1458	377	676	1432	2134	49.02
PLYMPTON	322	585	20	32	342	617	80.41
RAYNHAM	1691	2418	187	467	1878	2885	53.62
REHOBOTH	1670	2167	211	303	1881	2470	31.31
ROCHESTER	566	1004	38	36	604	1040	72.19
SEEKONK	2913	3602	400	541	3313	4143	25.05
SOMERSET	4450	5334	1046	1047	5496	6381	16.10
SWANSEA	3480	4669	389	456	3869	5125	32.46
TAUNTON	6081	7657	7668	9076	13749	16733	21.70
WAREHAM	3697	5858	694	1586	4391	7444	69.53
WESTPORT	2670	3997	422	686	3092	4683	51.46
DISTRICT TOTAL	79756	109491	78887	84551	158643	194042	22.31
BRISTOL COUNTY	69705	93953	76429	82704	146134	176657	20.89
PLYMOUTH COUNTY	73001	102979	28193	48320	101194	151299	49.51
MASSACHUSETTS	924629	1256777	911569	883364	1836198	2140141	16.55

SOURCE: 1980 U.S. CENSUS OF POPULATION.

# THE HISTORY OF THE UNITED STATES

CHAPTER	SECTION	DATE	PLACE	NAME	AGE	SEX	RELIGION	EDUCATION	PROFESSION	STATUS	REMARKS
I	1	1776	Philadelphia	George Washington	43	M	Protestant	College	General	President	First President of the United States
I	2	1776	Philadelphia	John Adams	38	M	Protestant	College	Lawyer	Vice President	Second President of the United States
I	3	1776	Philadelphia	Thomas Jefferson	33	M	Protestant	College	Writer	Secretary of State	Third President of the United States
I	4	1776	Philadelphia	James Madison	27	M	Protestant	College	Lawyer	Secretary of State	Fourth President of the United States
I	5	1776	Philadelphia	James Monroe	28	M	Protestant	College	Lawyer	Secretary of State	Fifth President of the United States
I	6	1776	Philadelphia	John Quincy Adams	27	M	Protestant	College	Lawyer	Secretary of State	Sixth President of the United States
I	7	1776	Philadelphia	Andrew Jackson	37	M	Protestant	College	General	President	Seventh President of the United States
I	8	1776	Philadelphia	Martin Van Buren	37	M	Protestant	College	Lawyer	President	Eighth President of the United States
I	9	1776	Philadelphia	William Henry Harrison	68	M	Protestant	College	General	President	Ninth President of the United States
I	10	1776	Philadelphia	John Tyler	51	M	Protestant	College	Lawyer	President	Tenth President of the United States
I	11	1776	Philadelphia	James K. Polk	49	M	Protestant	College	Lawyer	President	Eleventh President of the United States
I	12	1776	Philadelphia	Franklin Pierce	31	M	Protestant	College	Lawyer	President	Twelfth President of the United States
I	13	1776	Philadelphia	Abraham Lincoln	35	M	Protestant	College	Lawyer	President	Thirteenth President of the United States
I	14	1776	Philadelphia	Andrew Johnson	56	M	Protestant	College	Lawyer	President	Fourteenth President of the United States
I	15	1776	Philadelphia	Ulysses S. Grant	43	M	Protestant	College	General	President	Fifteenth President of the United States
I	16	1776	Philadelphia	Rutherford B. Hayes	45	M	Protestant	College	Lawyer	President	Sixteenth President of the United States
I	17	1776	Philadelphia	James A. Garfield	49	M	Protestant	College	Lawyer	President	Seventeenth President of the United States
I	18	1776	Philadelphia	Chester A. Arthur	46	M	Protestant	College	Lawyer	President	Eighteenth President of the United States
I	19	1776	Philadelphia	William McKinley	41	M	Protestant	College	Lawyer	President	Nineteenth President of the United States
I	20	1776	Philadelphia	Theodore Roosevelt	35	M	Protestant	College	Lawyer	President	Twentieth President of the United States
I	21	1776	Philadelphia	Woodrow Wilson	39	M	Protestant	College	Lawyer	President	Twenty-first President of the United States
I	22	1776	Philadelphia	Warren G. Harding	55	M	Protestant	College	Lawyer	President	Twenty-second President of the United States
I	23	1776	Philadelphia	Calvin Coolidge	48	M	Protestant	College	Lawyer	President	Twenty-third President of the United States
I	24	1776	Philadelphia	Herbert Hoover	54	M	Protestant	College	Lawyer	President	Twenty-fourth President of the United States
I	25	1776	Philadelphia	Franklin D. Roosevelt	58	M	Jewish	College	Lawyer	President	Twenty-fifth President of the United States
I	26	1776	Philadelphia	Dwight D. Eisenhower	62	M	Protestant	College	General	President	Twenty-sixth President of the United States
I	27	1776	Philadelphia	John F. Kennedy	43	M	Catholic	College	Lawyer	President	Twenty-seventh President of the United States
I	28	1776	Philadelphia	Lyndon B. Johnson	45	M	Catholic	College	Lawyer	President	Twenty-eighth President of the United States
I	29	1776	Philadelphia	Richard Nixon	56	M	Protestant	College	Lawyer	President	Twenty-ninth President of the United States
I	30	1776	Philadelphia	Gerald R. Ford	61	M	Protestant	College	Lawyer	President	Thirty-first President of the United States
I	31	1776	Philadelphia	Jimmy Carter	52	M	Protestant	College	Lawyer	President	Thirty-second President of the United States
I	32	1776	Philadelphia	Ronald Reagan	69	M	Protestant	College	Actor	President	Thirty-third President of the United States
I	33	1776	Philadelphia	George H. W. Bush	78	M	Protestant	College	Lawyer	President	Thirty-fourth President of the United States
I	34	1776	Philadelphia	Bill Clinton	46	M	Protestant	College	Lawyer	President	Thirty-fifth President of the United States
I	35	1776	Philadelphia	George W. Bush	42	M	Protestant	College	Lawyer	President	Thirty-sixth President of the United States
I	36	1776	Philadelphia	Barack Obama	47	M	Protestant	College	Lawyer	President	Thirty-seventh President of the United States
I	37	1776	Philadelphia	Mitt Romney	51	M	Protestant	College	Lawyer	President	Thirty-eighth President of the United States
I	38	1776	Philadelphia	Donald Trump	70	M	Protestant	College	Businessman	President	Thirty-ninth President of the United States
I	39	1776	Philadelphia	Joe Biden	77	M	Catholic	College	Lawyer	President	Fortieth President of the United States
I	40	1776	Philadelphia	Kamala Harris	56	F	Hindu	College	Lawyer	President	Forty-first President of the United States



## Building Permits

CITY/TOWN	1980	1981	1982	1983	1984	TOTAL
ACUSHNET	17	13	18	31	34	113
ATTLEBORO	40	31	48	116	189	424
BERKLEY	34	14	11	27	45	131
CARVER	48	36	45	42	86	257
DARTMOUTH	311	41	253	72	126	803
DIGHTON	14	8	10	17	21	70
FAIRHAVEN	11	64	9	16	21	121
FALL RIVER	76	38	90	86	128	418
FREETOWN	51	21	32	25	52	181
LAKEVILLE	40	27	30	86	107	290
MANSFIELD	50	49	112	175	190	576
MARION	13	21	14	28	22	98
MATTAPOISETT	20	14	19	36	54	143
MIDDLEBOROUGH	37	31	39	61	79	247
NEW BEDFORD	19	286	30	44	45	424
NO. ATTLEBOROUGH	61	60	381	119	204	825
NORTON	29	29	31	62	87	238
PLAINVILLE	2	22	42	67	46	179
PLYMPTON	9	5	15	17	29	75
RAYNHAM	21	35	17	28	33	134
REHOBOTH	24	23	18	52	74	191
ROCHESTER	19	20	23	21	57	140
SEEKONK	35	30	30	49	41	185
SOMERSET	4	13	27	49	47	140
SWANSEA	22	21	26	42	26	137
TAUNTON	193	48	96	86	163	586
WAREHAM	26	36	29	33	69	193
WESTPORT	<u>44</u>	<u>30</u>	<u>30</u>	<u>34</u>	<u>44</u>	<u>182</u>
DISTRICT TOTALS	1,270	1,066	1,525	1,521	2,119	7,501

SOURCE: U.S. Department of Commerce, Bureau of the Census.



## Labor Force

CITY/TOWN	LABOR FORCE*		LABOR FORCE GROWTH RATE 1970-1980	PARTICIPATION RATE*	
	1970	1980		1970	1980
ACUSHNET	3442	4454	29.40	65.30	67.00
ATTLEBORO	14761	17667	19.69	66.20	68.80
BERKLEY	861	1309	52.03	65.00	67.30
CARVER	989	2895	192.72	54.20	62.90
DARTMOUTH	8239	11713	42.17	60.60	62.30
DIGHTON	2089	2662	27.43	66.40	68.30
FAIRHAVEN	6973	7303	4.73	59.50	58.80
FALL RIVER	43090	41870	-2.83	60.80	59.10
FREETOWN	1697	3399	100.29	61.10	69.80
LAKEVILLE	1736	2732	57.37	58.60	62.70
MANSFIELD	4052	6791	67.60	62.90	70.50
MARION	1269	1802	42.00	55.80	63.60
MATTAPOISETT	1831	2806	53.25	59.50	64.60
MIDDLEBOROUGH	5541	7293	31.62	60.40	61.80
NEW BEDFORD	43853	44891	2.37	58.80	59.00
N. ATTLEBOROUGH	8477	10785	27.23	68.90	69.60
NORTON	4066	6497	59.79	61.70	69.40
PLAINVILLE	1935	2986	54.32	64.70	67.00
PLYMPTON	497	916	84.31	58.80	66.90
RAYNHAM	2910	4513	55.09	68.50	69.90
REHOBOTH	2704	3737	38.20	64.40	67.50
ROCHESTER	846	1459	72.46	62.50	64.40
SEEKONK	4826	6271	29.94	65.00	68.60
SOMERSET	7973	9715	21.85	64.30	67.10
SWANSEA	5409	7682	42.02	62.50	68.00
TAUNTON	18436	21725	17.84	59.30	63.00
WAREHAM	4438	7457	68.03	56.20	55.00
WESTPORT	4188	6659	59.00	62.30	65.40
DISTRICT TOTAL	207128	249989	20.69	60.10	63.4
BRISTOL COUNTY	192891	227930	18.17	61.50	63.4
PLYMOUTH COUNTY	104030	188038	80.75	60.10	63.9
MASSACHUSETTS	2444926	2832564	15.85	57.80	63.5
FALL RIVER LMA*	62749	68588	9.31	61.60	62.00
NEW BEDFORD LMA	69886	80559	15.27	59.40	61.10
TAUNTON LMA	22207	27547	24.05	60.60	64.50

\*LMA IS LABOR MARKET AREA: SEE MAP 1. LABOR FORCE IS PERSONS EMPLOYED, UNEMPLOYED & MEMBERS OF THE ARMED FORCES. PARTICIPATION RATE IS THE PORTION OF THE POPULATION 16 YRS+ IN THE LABOR FORCE.

SOURCE: 1970 & 1980 U.S. CENSUS OF POPULATION.



## Employment by Industry

CITY/TOWN	GOVERNMENT* 1984	AGRICULTURE FORESTRY FISHING			CONTRACT CONSTRUCTION		
		1970	1979	1984 **	1970	1979	1984
ACUSHNET	202	10	13	35	89	109	180
ATTLEBORO	942	55	24	C	342	431	443
BERKLEY	120	0	0	C	3	3	C
CARVER	162	0	31	C	19	16	19
DARTMOUTH	1218	104	115	116	244	175	278
DIGHTON	510	18	23	C	18	33	38
FAIRHAVEN	448	311	369	573	142	102	123
FALL RIVER	3335	33	52	C	1103	895	917
FREETOWN	382	1	9	C	38	143	171
LAKEVILLE	502	13	6	C	33	43	C
MANSFIELD	422	29	37	24	59	60	88
MARION	161	10	13	67	38	27	33
MATTAPOISETT	387	8	4	28	77	94	107
MIDDLEBOROUGH	885	0	42	69	181	166	301
NEW BEDFORD	4851	1053	1533	1617	1318	883	1098
NO. ATTLEBOROUGH	669	29	48	63	488	288	315
NORTON	392	14	20	78	48	120	92
PLAINVILLE	106	13	9	C	35	143	113
PLYMPTON	97	1	0	C	7	31	32
RAYNHAM	242	10	69	C	73	45	133
REHOBOTH	212	8	29	30	189	41	114
ROCHESTER	187	22	41	51	20	21	48
SEEKONK	438	35	55	60	165	124	179
SOMERSET	625	31	23	C	162	125	211
SWANSEA	429	14	12	8	119	224	175
TAUNTON	4058	11	21	13	361	427	513
WAREHAM	602	2	238	284	105	105	175
WESTPORT	366	13	39	81	124	143	169
DISTRICT TOTAL	22950	1848	2875		5600	5017	
FALL RIVER LMA	5265	109	149		1526	1420	
NEW BEDFORD LMA	8068	1532	2103		1999	1597	
TAUNTON LMA	4420	21	90		437	475	
MASSACHUSETTS	352784			16539			96298

\*Data on Government not available prior to 1980. Totals for 1970 and 1979 do not include Government employment.

\*\*District and Subregion totals for 1984 cannot be prepared because of the suppression of data at the municipal level.





MANUFACTURING			TRANS. COMMUNICATION UTILITIES			WHOLESALE/ RETAIL TRADE			FINANCE INSURANCE REAL ESTATE		
1970	1979	1984	1970	1979	1984	1970	1979	1984	1970	1979	1984
930	977	C	36	31	21	231	199	284	5	7	15
15561	17250	14773	246	350	377	1941	3069	2909	367	421	471
2	4	C	10	7	C	24	46	23	0	0	C
0	8	C	5	9	12	17	41	94	0	1	C
382	213	268	415	139	226	911	2957	3808	10	86	105
2298	541	1220	14	12	8	98	67	C	13	23	C
438	391	437	20	204	243	658	1342	1670	76	178	191
20184	18838	18265	2210	1299	1059	7509	7593	7135	1837	2308	2316
113	333	345	50	86	65	196	208	230	0	18	C
0	6	30	16	12	C	130	166	158	0	9	21
1075	1610	4341	21	17	45	328	1287	2731	49	79	154
504	264	C	62	54	49	130	174	222	6	34	46
60	68	82	21	30	C	174	299	336	7	38	50
1082	1260	1223	68	144	204	761	1006	1072	127	208	200
24343	24146	21666	1600	1791	1550	8864	7185	7812	1339	1580	1680
2300	2842	2574	45	209	253	945	1413	1367	151	241	248
651	683	670	4	5	C	230	489	890	9	18	20
1073	1164	1658	0	33	C	278	308	557	13	25	36
162	620	C	2	4	C	17	9	16	1	8	C
58	60	126	98	117	84	772	1533	2123	6	56	70
33	106	C	46	41	39	227	692	180	7	16	C
20	5	C	51	1	C	4	22	C	0	0	C
482	268	349	22	113	492	969	2096	2846	24	38	48
179	251	425	367	424	483	1152	1079	1348	74	163	206
258	359	193	9	32	26	416	2044	2326	18	43	68
6189	6560	4471	315	643	492	2254	2918	3053	385	651	775
183	212	537	73	174	508	619	1140	1267	111	168	130
159	177	248	128	62	36	533	580	718	15	29	32
78719	79216		5954	6043		30388	39962		4650	6446	
23078	20166		2728	1829		9708	11363		1957	2566	
26790	26403		2271	2348		11298	12552		1443	1950	
6249	6624		423	767		3050	4497		391	707	
672227			119458			656502			175092		

=Confidential as there are less than three reporting units in the total.



## Employment by Industry

CITY/ TOWN	SERVICE			MINING			TOTAL		
	1970	1979	1984	1970	1979	1984	1970	1979	1984
ACHUSNET	61	58	76	0	0	0	1362	1394	1903
ATTLEBORO	619	2467	3103	0	0	0	19131	24012	23044
BERKLEY	0	0	C	0	0	0	39	60	198
CARVER	28	89	C	0	0	C	69	195	566
DARTMOUTH	497	1081	1225	0	0	0	2563	4766	7245
DIGHTON	77	468	155	0	0	0	2536	1167	2820
FAIRHAVEN	237	585	654	0	0	0	1882	3171	4341
FALL RIVER	2647	7463	7398	2	0	0	35525	38448	40519
FREETOWN	107	178	273	18	1	0	523	976	1491
LAKEVILLE	122	170	295	0	0	0	314	412	1098
MANSFIELD	94	239	747	0	0	0	1655	3329	8551
MARION	113	348	408	0	0	0	863	914	1484
MATTAPOISETT	89	74	138	0	0	0	436	607	1330
MIDDLEBOROUGH	267	886	1060	0	23	C	2486	3735	5079
NEW BEDFORD	3549	6278	7478	0	0	0	42066	43396	47751
NO. ATTLEBOROUGH	295	417	672	10	16	C	4263	5474	6184
NORTON	207	777	931	0	0	0	1163	2112	3090
PLAINVILLE	92	136	191	0	41	C	1504	1859	2766
PLYMPTON	5	11	8	0	0	0	195	683	611
RAYNHAM	251	124	815	0	0	0	1268	2004	3673
REHOBOTH	76	144	150	0	0	0	586	1069	850
ROCHESTER	2	10	C	0	0	C	119	100	368
SEEKONK	299	437	598	0	0	0	1996	3131	5010
SOMERSET	151	266	528	0	0	0	2116	2331	3843
SWANSEA	143	312	432	38	0	0	1015	3026	3656
TAUNTON	729	2186	2726	20	25	C	10264	13431	14983
WAREHAM	269	712	907	12	6	C	1374	2755	4420
WESTPORT	90	208	488	4	0	0	1066	1238	2137
DISTRICT TOTAL	11116	26124		104	112		138379	165795	199011
FALL RIVER LMA	3108	8717		44	0		42258	46210	52975
NEW BEDFORD LMA	4777	8782		18	1		50128	55736	67011
TAUNTON LMA	980	2310		20	25		11571	15495	18854
MASSACHUSETTS		704959				1148		2795008	

SOURCE: Employment and wages in Massachusetts Cities and Towns, 1967, 1979, 1980-1984, Division of Employment Security.



EMPLOYER*	PRODUCT	ADDRESS	AVERAGE EMPLOYMENT
SWANK, INC. Pres. Marshall Tulin (222-3400)	Jewelry, leather goods	6 Hazel Street Attleboro	3,200
TEXAS INSTRUMENTS, INC. Pres. Dave Martin (699-3800)	Electrical products	34 Forest Street Attleboro	2,500
ACUSHNET COMPANY Pres. R.L. Austin (997-2811)	Golf equipment, molded rubber	Belleville Avenue New Bedford	2,300
L.G. BALFOUR COMPANY Chair. Thomas Wyman (222-3600)	Emblematic jewelry	25 County Street Attleboro	2,100
ANDERSON-LITTLE COMPANY Pres. Wm. Gaudreau (676-1901)	Clothing	502 Bedford Street Fall River	2,000
CODEX CORP. Pres. James Story (364-2000)	Data communica- tions systems	20 Cabot Blvd. Mansfield	2,000
CLIFTEX CORP. Pres. Domenick Nicolaci (999-1311)	Mens sportcoats and suits	194 Chandler Ave. New Bedford	1,280
ROBERTSON FACTORIES, INC. Chair. William Washburn (823-5141)	Curtains, draper- ies, bedspreads	33 Chandler Ave. Taunton	1,280
CHAMBERLINE NATIONAL CORP. Gen. Mgr. James Flaherty (996-8561)	Steel and aluminum products	117 King Street New Bedford	1,000
CORNELL-DUBILIER Electronics Pres. James Kaplan (996-9611)	Capacitors	1605 Rodney French Boulevard New Bedford	1,000
MORSE CUTTING TOOLS Mgr. Edward Waters (994-9611)	Metal cutting tools	169 Pleasant Street New Bedford	1,000

\*Businesses with 500 or more employees.



[illegible]



EMPLOYER*	PRODUCT	ADDRESS	AVERAGE EMPLOYMENT
REED & BARTON Chair. Roger Hollowell (824-6611)	Silverware	144 Britannia Street Taunton	975
GOODYEAR TIRE & RUBBER CO. Pres. R.E. Mercer (994-9603)	Rubber products	545 Orchard Street New Bedford	900
LEACH & GARNER CO. Chair. Philip Leach (222-7400)	Karat gold, jewelry findings	49 Pearl Street Attleboro	900
CALVIN CLOTHING CORP. Pres. Henry Segal (996-8511)	Clothing	64 Conduit Street New Bedford	800
ENGELHARD CORP. Pres. O.R. Smith (695-7811)	Contact parts and materials	Route 152 Plainville	700
AEROVOX INDUSTRIES, INC. Pres. Clifford Tuttle (994-9661)	Capacitors	740 Belleville Avenue New Bedford	650
ALUMINUM PROCESSING CORP. Pres. Fred Heller (679-8131)	Metal spinning, hydroforming and reflectors	631 Airport Road Fall River	650
DATEL-INTERDIL Pres. Nicholas Tagaris (339-9341)	Data converters and acquisition systems	11 Cabot Boulevard Mansfield	600
SHELBOURNE SHIRT COMPANY Pres. Seymour Epstein (674-3555)	Mens shirts	41 Alden Street Fall River	600
LOUIS HAND Pres. Chuck Reiter (697-8141)	Curtains, draper- ies, kitchen accessories	847 Pleasant Street Fall River	585
PCI GROUP, INC. Pres. C.F. DeMailly (995-2641)	Metal fasteners, shoe making sup- plies, maintenance chemicals	N.B. Industrial Park New Bedford	550
DUCKBEE MEARS CO. Pres. Charles Vicario (695-8634)	Ophthalmic goods	Triboro Ind. Park No. Attleborough	500

SOURCE: Directory of Massachusetts Manufacturers, 1983-1984 Edition.

[illegible]







MASS. Y3. SR1/3: 988 ✓

WILSON OVERMAN  
COLLECTION

APR 25 1991

State of Massachusetts  
Department of

# OVERALL ECONOMIC DEVELOPMENT PROGRAM

for  
southeastern massachusetts

1988

prepared by  
southeastern regional planning  
and economic development district





SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT  
88 Broadway Taunton, MA 02780

1987  
ANNUAL REPORT  
and  
1988  
PROGRAM PROJECTION

OF THE

OVERALL ECONOMIC DEVELOPMENT PROGRAM

JULY 1988



Prepared with funding from the  
U.S. Economic Development Administration

CREDITS

SRPEDD COMMISSION  
ECONOMIC DEVELOPMENT COMMISSION

STAFF

Stephen C. Smith--Executive Director  
Maria Gooch--Director of Economic Development  
Susan Sherman--Head of Graphics  
Anne Dufresne--Secretary



## CONTENTS

I.	INTRODUCTION.....	1
II.	ADMINISTRATION.....	3
	A. AREA DESIGNATION AND PARTICIPATING GOVERNMENTS.....	3
	B. DISTRICT ORGANIZATION.....	4
III.	DEVELOPMENT EFFORTS.....	10
IV.	THE DISTRICT'S ECONOMY.....	13
V.	ECONOMIC DEVELOPMENT CENTERS.....	28
VI.	POTENTIAL FOR ECONOMIC DEVELOPMENT.....	30
	A. ANALYSIS OF POTENTIALS.....	31
	B. CONSTRAINTS.....	32
VII.	STRATEGY AND IMPLEMENTATION.....	34
	A. PROGRAM AND PROJECT SELECTION.....	34
	B. PROGRAM CONSIDERATIONS AND COURSE OF ACTION.....	34
	C. PLAN FOR IMPLEMENTATION.....	39





# introduction

1000000

The mission of the Economic Development Administration (EDA) under the U.S. Department of Commerce is to enhance the national economy.\* EDA assists communities and areas experiencing economic distress to help themselves achieve lasting improvement. EDA's role is to support the effort of local people in devising their own programs to solve problems.

The program developed by local people to address an area's problems is the Overall Economic Development Program (OEDP). The OEDP is both a document and a process--a process of area self-analysis, planning, and action to create new economic activity and improve community facilities and services.

The Public Works and Economic Development Act of 1965, as amended, requires that redevelopment areas and economic development districts such as SRPEDD formulate an OEDP. EDA must approve the OEDP prior to designating redevelopment areas and economic development districts as qualified to receive assistance.\*\*

Continued eligibility of an EDA-designated redevelopment area or economic development district is contingent upon regular updating of the OEDP. This may be accomplished by submitting to EDA an Annual OEDP Report and Program Projection such as this one. Redevelopment areas located in a designated economic development district may satisfy this requirement by concurring with the district's annual report covering the area's activities.

An OEDP identifies assets and liabilities. It sets a course of action for dealing with problems created by unemployment and a sagging economy. Preparation of the OEDP is a process guided by a committee representing economic development interests in the area. Without this process efforts to tackle problems become disconcerted.

Beyond making it easier for an area to address economic problems, the OEDP also makes the area eligible for EDA funding. In southeastern Massachusetts, SRPEDD receives EDA funding to prepare an OEDP which makes six redevelopment areas eligible for EDA grants.

---

\*U.S. Department of Commerce, Economic Development Administration. EDA Handbook, June, 1977.

\*\* Guide for District Overall Economic Development Program, May, 1977.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

OFFICE OF THE DEAN  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637  
(773) 936-7000

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
1100 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

Because SRPEDD updates the OEDP annually to maintain eligibility as an economic development district, member communities are also eligible for 10 percent bonuses on the total cost of public works projects.

The Annual OEDP does not include the detail of the original SRPEDD OEDP published in 1969. It provides, however, a review of accomplishments and significant changes in the economy during the past year and proposes a strategy to meet the new situation. This is a continuous and dynamic process.

The annual OEDP contains these elements:

- Fact gathering to assure understanding of current developments;
- Identification of potentials;
- Appraisal of urban places suitable to serve as centers for growth;
- Establishment of goals and intermediate objectives to direct development activities and measure progress;
- Devising a strategy for development--a plan to achieve goals and objectives (a listing of projects); and
- Provision of a work program proposing methods for implementation of the strategy and projects.

Beyond making the area eligible for EDA funding, the most important aspect of the annual OEDP, by far, is the listing of projects in the region to be funded by EDA. Projects are ranked in order of priority. The listing provides guidance to EDA on which projects should be funded first.





administration



A. AREA DESIGNATION  
AND PARTICIPATING  
GOVERNMENTS

On November 13, 1969, the Southeastern Regional Planning Commission was designated by the Economic Development Administration (EDA) as an Economic Development District (EDD) under Title VI of the Public Works and Economic Development Act of 1965.

The purpose of an Economic Development District is to foster successful economic development on a large scale by grouping together economically distressed and healthy areas--redevelopment areas and economic development centers or growth centers.

The District encompasses portions of three counties, twenty-eight municipalities and six redevelopment areas. The District's county membership includes: all of the communities in Bristol County with the exception of the Town of Easton; the towns of Carver, Lakeville, Marion, Mattapoisett, Middleborough, Plympton, Rochester and Wareham in Plymouth County; and Plainville in Norfolk County.

Four of the District's redevelopment areas--Bourne/Wareham/Rochester, New Bedford, Providence/Pawtucket, and Plymouth--were designated in 1966. The Fall River Redevelopment Area was designated in 1972 and the Taunton Redevelopment Area was designated in 1974. The Town of Mansfield is presently not included within a redevelopment area.

These redevelopment areas were designated on the basis of "substantial and/or persistent unemployment."\* Redevelopment area designation enables an area to be eligible for the whole range of programs authorized by the Public Works and Economic Development Act.

Redevelopment Areas were originally established on the basis of labor market area (LMA) information furnished by the Massachusetts Division of Employment Security (DES). Since designation, however, DES has changed the labor market area boundaries. The Bourne/Wareham/Rochester LMA has been eliminated, and Wareham and Rochester, both District communities, have been incorporated into the Plymouth and New Bedford LMA's respectively.

---

\*U.S. Department of Commerce, Economic Development Administration. Designated Redevelopment Areas under the Public Works and Economic Development Act of 1965, as Amended, October 1, 1978.



This new composition presents a problem by interrupting the continuity needed for trend analysis. Furthermore, the new labor market area boundaries are not similar to the federally designated Standard Metropolitan Statistical Areas (SMSA's) in the District--Fall River and New Bedford. Figure 1 shows the present labor market areas in the District for which DES provides information.

For the purposes of manpower planning DES has also established Service Delivery Areas (SDA's). Much of the statistical information is now provided for these geographic divisions.

The District also has two designated economic development centers (EDC's)--the cities of Fall River and Taunton--and a redevelopment center (RC), the City of New Bedford. These growth centers are the economic activity nuclei of their respective redevelopment areas.

Redevelopment Centers are those which are recognized as falling within a designated redevelopment area. Unlike economic development centers there is no limit on the population of RC's, which may be in excess of 250,000 as of the last federal census.

#### DISTRICT ORGANIZATION

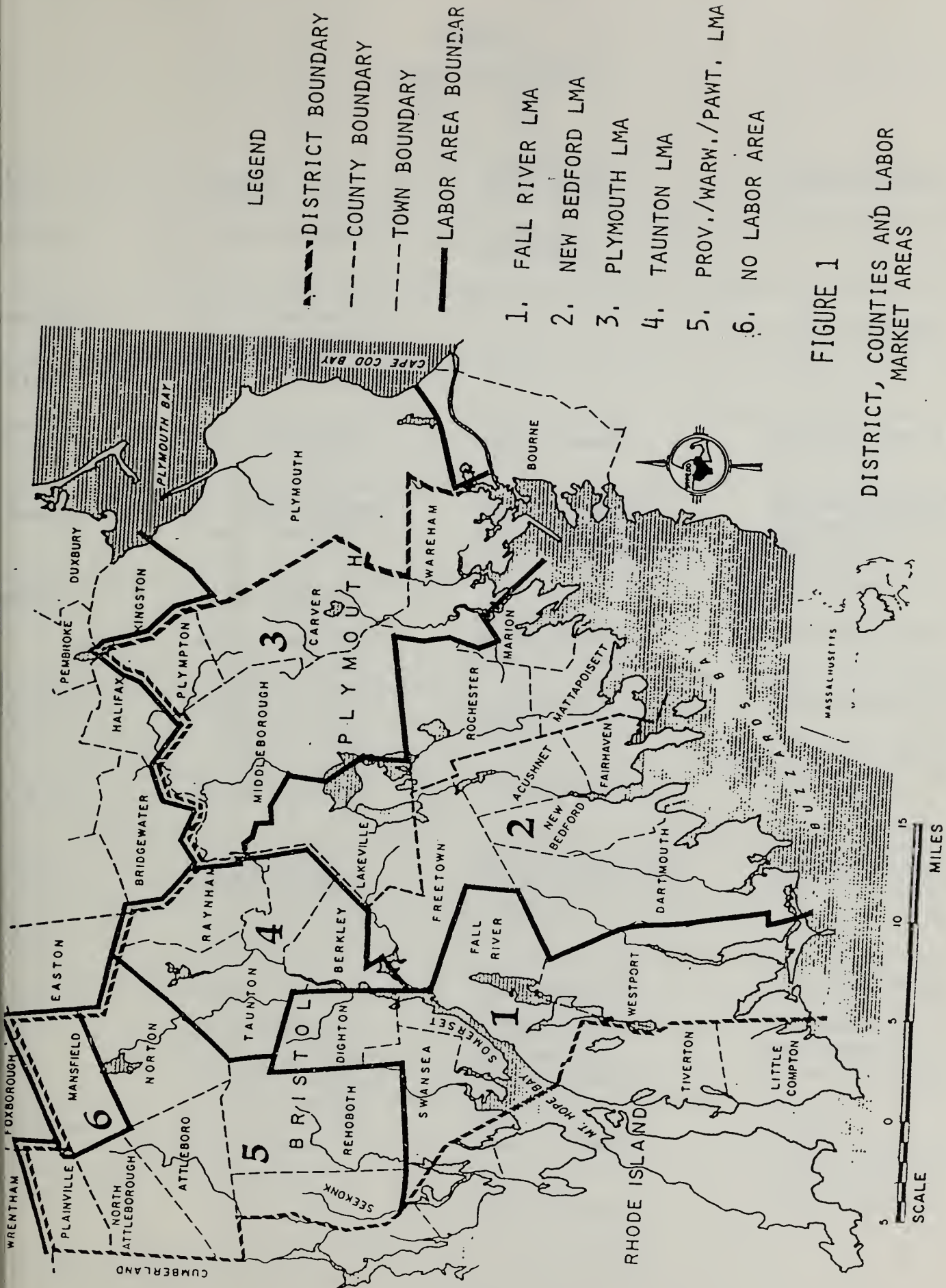
The Commission of the Southeastern Regional Planning and Economic Development District serves as the Overall Economic Development Program (OEDP) Committee for the District. The committee sets policy and provides guidance on all matters relating to the economic development of the District. But, because of its size, it relies on a smaller advisory committee, the Economic Development Committee (EDC) for specific recommendations.

The EDC is responsible in conjunction with the OEDP Committee for developing criteria, and ranking economic development projects in the District. The committee also guides and assists the overall staff effort to prepare and implement the District's economic development program.

Membership lists for both committees are included in this section.







**FIGURE 1**  
DISTRICT, COUNTIES AND LABOR  
MARKET AREAS



TABLE 1  
COMMISSION MEMBERS  
1987 - 1988

CITY/ TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
Dorchester	Lawrence Mulvey*	Commonwealth Electric/ Selectman	Business/Government
Attleboro	William Woloshyn Robert Mawney*		Local Planning
Berkley			
Concord	John Michevich	Mass. Transit	Business/Local Plan.
Dorchester	Lorri-Ann Miller Basil Castaldi*	Dental Assistant Education Consultant/ Planning Board	Business/Government Education/Local Planning
Dighton	Allan Campbell Manuel Ferreira*	Prof. of Civil Engineering Restaurateur/ Planning Board	Education Business/Local Planning
Fairhaven	Raymond Fleurent*	Contractor/Planning Board	Business/Local Planning
Fall River	Alfred Edwards	Planning Director	Planning
Hydenville	Theresa Getty Charles Boynton*	Secretary/Selectmen Planning Board	Government Local Planning
Leicester	Luke Leonard, Jr.	Teacher	Education
Marblehead	Michael McClanahan*	Planning Board	Local Planning
	Kelli Baker	Office Manager	Business
Marion	Loretta Schaffer* Franklin Winters*	Selectwoman Planning Board	Government Local Planning
Marblehead	Peter Kortright Barry Denham	Bank V.P. Planning Board	Finance Local Planning
Marblehead	Larry Carver Joseph Freitas, Jr.*	Retired Planning Board	Government Local Planning

Elected Official





CITY / TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
New Bedford	Alfred Lima	City Planner	Government
North Attleborough	Patricia Redding*	Planning Board	Local Planning
Norton	John Tyler*	Planning Board	Local Planning
Painville	Andrea Soucy*	Teacher/Planning Board	Education/Government
Plympton	Lee Johnson William Slater	Teacher Planning Board	Education/Government Planning
Ryanham	Emeline MacDonald	Retired	Government
	Henry Ellis	Attorney	Government
Seabrook	Suzanne M. DiPietro Donna McCombs	Business Owner Planning Board	Business/Government Local Planning
Westchester	George Bare	Industrial Engineer	Business/Government
Weymouth	Bruce Boynton		Government
	Robert Lombardi	Planning Board	Local Planning
Weymouth	Donald J. Hussey Raymond McConnell*	Advertising Planning Board	Business/Government Local Planning
Weymouth	Charles Baldwin*	Planning Board	Local Planning
Weymouth	William Fitzgerald John L. Viveiros *	Community Dev. Dir. Bacteriologist	Government Health/Local Planning
Weymouth	Constantine Yankoupolos*	Community Dev. Dir.	Government
	Nancy Haley	Job Developer	Local Planning
Weymouth	Charlene Wood Edmund Medeiros*	Selectmen Adm. Asst. Teacher	Government Education/Local Planning

#### COMMISSIONERS-AT-LARGE

Seabrook Area (1)		
River Area (2)	Tom Alecrim	Minority/Low Income
Bedford Area (2)	Jayme Dias	Minority/Low Income
Norton Area (1)	Jose Torres	Minority/Low Income

#### OFFICERS

Don Campbell, Chairman; William Fitzgerald, Vice Chairman;  
 Donald Hussey, Treasurer; Emeline MacDonald, Asst. Treas.; George Bare, Past Chmn.

Selected Official





TABLE 2  
ECONOMIC DEVELOPMENT COMMITTEE  
MEMBERSHIP LIST  
1988

SRPEDD COMMISSION MEMBERS

Allan Campbell  
SRPEDD Chairman  
Dighton, MA

George Bare  
SRPEDD Past Chairman  
Rochester, MA

Dr. Basil Castaldi  
Planning Board  
Dartmouth, MA

Bill Fitzgerald  
SRPEDD Vice Chairman  
Community Dev. Dir.  
Taunton, MA

Constantine Yankopoulos  
Community Dev. Dir.  
Wareham, MA

Emeline MacDonald  
SRPEDD Asst. Treasurer  
Raynham, MA

Patricia Redding  
Planning Board  
No. Attleborough, MA

Peter Kortright  
Selectmen's Delegate  
Mattapoissett, MA

Alfred Lima  
City Planner  
New Bedford, MA

Jayme Dias  
PACE, Inc.  
New Bedford, MA

PUBLIC AND PRIVATE SECTOR MEMBERS

Heather G. Bare  
Consultant  
Rochester, MA

Maureen Wells  
Assist. Economic Dev. Dir.  
New Bedford, MA

Frank Cahill  
Division of Employment Security  
Boston, MA

Aaron Mittleman, President  
New England Apparel Mfg. Assoc., Inc.  
Fall River, MA

Brenda Reed  
Governor's Office of  
Economic Development  
Boston, MA

Robert Smith  
Bristol County Development Council  
New Bedford, MA

Stephen Andrade  
Southeastern Massachusetts  
Partnership  
Dartmouth, MA

Stephen C. Williams  
Durfee Attleboro Bank  
Fall River, MA

Paul Vigeant, Director  
Jobs for Fall River, Inc.  
Fall River, MA

William Spaner  
Community Development for Attleboro  
Attleboro, MA

11700 3  
24918 1

2011075  
111122  
111103

[illegible]

118

2300 1000

1	111	1
2	112	2
3	113	3
4	114	4

1. 10  
2. 10  
3. 10  
4. 10  
5. 10

 $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}$ 

1

Michel Lacasse  
Town Planner  
Mansfield, MA

Gary Ayrassian  
City Planner  
Attleboro, MA

Craig Bloom  
Town Planner  
Freetown/Lakeville, MA

Don Johnson  
Town Planner  
No. Attleborough, MA

Clyde Mitchell  
Small Business Development  
Center  
Fall River, MA

Nicholas Tangney  
Town Planner  
Fairhaven, MA

Charles Mello  
Town Planner  
Seekonk, MA

Anastasia Kanellopoulos  
Town Planner  
Norton, MA

Shaun Burke  
Town Planner  
Swansea/Rehoboth, MA

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

11111111

development  
efforts





## A. EDA PROJECTS

From 1966 to 1987, the U.S. Economic Development Administration (EDA) invested \$24 million in the region. Table 3 outlines the projects funded.

### INDUSTRIAL PARKS

Over \$7 million of this investment was in five industrial parks throughout the region, including:

- Fall River Industrial Park
- New Bedford Industrial Park
- North Attleborough Industrial Park
- Taunton Myles Standish Industrial Park
- Wareham Industrial Park

These parks have provided space for existing industries and attracted new industries. They have brought new jobs to the region and have helped improve the economic climate by supporting spinoff businesses, leveraging private investment and supplementing local property taxes.

Many of these EDA funded industrial parks have been so successful they are at or near capacity. All 165 acres of the North Attleborough Park are developed. This development spanning 20 years provides space to 34 firms, employs over 2,000 people and generates over \$400,000 in tax revenue a year.

In Fall River, a recent road extension has added 135 acres to their 210 acre park. The Fall River Park currently houses 31 companies that employ approximately 2,000 people.

In 1982 EDA funded the extension of Barnet Boulevard in the New Bedford Industrial Park. This \$2 million project has opened up 300 additional acres. In Taunton, nearly all of the 437 acres in the Myles Standish Industrial Park have been sold to high technology related companies including GTE.

When all of the proposed tenants move in, the park will have a total of 59 companies, occupying 2,500,000 square feet in 40 different facilities representing a private capital investment of over \$150 million. For Taunton, this means approximately 3,900 jobs and \$2.5 million in annual tax revenues.



The availability of reasonably priced industrial land, a skilled labor force, cooperative government officials, and a quality of life second to none have made the region attractive to industry.

#### TECHNICAL ASSISTANCE AND INFRASTRUCTURE IMPROVEMENTS

Continued technical assistance to communities and planning investments from EDA to agencies such as SRPEDD have also insured development of cohesive, coordinated strategies for the area and implementation of overall goals. This process-- a minimal investment of over one million dollars in 19 years--has insured cost effective use of federal funds.

EDA has also invested a little over \$10 million to improve the infrastructure of the four cities and provide other necessary facilities. The impact of this investment can be observed in the many revitalization efforts being undertaken in the region's cities.

年	月	日	星期	晴雨	温度	湿度	风向	风力	云量	能见度	气压	备注
1950	1	1	星期一	晴	10-15	75%	北风	3级	100%	10公里	1013.5	
1950	1	2	星期二	晴	12-18	70%	北风	4级	100%	10公里	1014.0	
1950	1	3	星期三	晴	15-20	65%	北风	5级	100%	10公里	1014.5	
1950	1	4	星期四	晴	18-25	60%	北风	6级	100%	10公里	1015.0	
1950	1	5	星期五	晴	20-30	55%	北风	7级	100%	10公里	1015.5	
1950	1	6	星期六	晴	22-32	50%	北风	8级	100%	10公里	1016.0	
1950	1	7	星期日	晴	25-35	45%	北风	9级	100%	10公里	1016.5	
1950	1	8	星期一	晴	28-38	40%	北风	10级	100%	10公里	1017.0	
1950	1	9	星期二	晴	30-40	35%	北风	11级	100%	10公里	1017.5	
1950	1	10	星期三	晴	32-42	30%	北风	12级	100%	10公里	1018.0	
1950	1	11	星期四	晴	35-45	25%	北风	13级	100%	10公里	1018.5	
1950	1	12	星期五	晴	38-48	20%	北风	14级	100%	10公里	1019.0	
1950	1	13	星期六	晴	40-50	15%	北风	15级	100%	10公里	1019.5	
1950	1	14	星期日	晴	42-52	10%	北风	16级	100%	10公里	1020.0	
1950	1	15	星期一	晴	45-55	5%	北风	17级	100%	10公里	1020.5	
1950	1	16	星期二	晴	48-58	0%	北风	18级	100%	10公里	1021.0	
1950	1	17	星期三	晴	50-60	0%	北风	19级	100%	10公里	1021.5	
1950	1	18	星期四	晴	52-62	0%	北风	20级	100%	10公里	1022.0	
1950	1	19	星期五	晴	55-65	0%	北风	21级	100%	10公里	1022.5	
1950	1	20	星期六	晴	58-68	0%	北风	22级	100%	10公里	1023.0	
1950	1	21	星期日	晴	60-70	0%	北风	23级	100%	10公里	1023.5	
1950	1	22	星期一	晴	62-72	0%	北风	24级	100%	10公里	1024.0	
1950	1	23	星期二	晴	65-75	0%	北风	25级	100%	10公里	1024.5	
1950	1	24	星期三	晴	68-78	0%	北风	26级	100%	10公里	1025.0	
1950	1	25	星期四	晴	70-80	0%	北风	27级	100%	10公里	1025.5	
1950	1	26	星期五	晴	72-82	0%	北风	28级	100%	10公里	1026.0	
1950	1	27	星期六	晴	75-85	0%	北风	29级	100%	10公里	1026.5	
1950	1	28	星期日	晴	78-88	0%	北风	30级	100%	10公里	1027.0	
1950	1	29	星期一	晴	80-90	0%	北风	31级	100%	10公里	1027.5	
1950	1	30	星期二	晴	82-92	0%	北风	32级	100%	10公里	1028.0	
1950	1	31	星期三	晴	85-95	0%	北风	33级	100%	10公里	1028.5	

TABLE 3  
EDA GRANTS TO MUNICIPALITIES

1966-1986

DATE	COMMUNITY	PROJECT	GRANT
1966	Fall River	Port Development (T.A.)	\$ 50,000
"	"	Vocational Tech. H.S. (P.W.)	3,053,000
"	New Bedford	Terminal Bulkhead (P.W.)	2,902,000
"	Dartmouth	Extension of Water Distribution Syst. (P.W.)	27,000
1967	Fall River	Industrial Expansion (T.A.)	2,000
"	"	Ace Plastic (A.G.)	2,000
"	Plymouth	Waste Treatment Plant (P.W.)	1,056,000
"	"	Industrial Dev. Plan (T.A.)	25,000
1968	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	1,032,000
"	North Attleborough	Master Plan/Ind. Park (T.A.)	20,000
"	Plymouth	Water/Sewer/Road to Industrial Park (P.W.)	393,000
1969	New Bedford	Water/Sewer/Road to Industrial Park (P.W.)	517,000
1970	Fairhaven	Industrial Park Study (T.A.)	8,000
"	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	200,000
1972	North Attleborough	Industrial Park (P.W.)	294,000
"	New Bedford	Urban Coalition/Red Crab Aquaculture Project (T.A.)	108,000
"	Plymouth	Sewer Pump Station (P.W.)	188,000
1973	Taunton	Industrial Park Study (T.A.)	15,000
1974	New Bedford	Water Main Const. (P.W.)	1,294,000
"	"	Urban Coalition/Red Crab Project (T.A.)	5,000
"	Somerset	Water Transmission Line (P.W.)	450,000
"	Taunton	Sewer Main/Ind. Park (P.W.)	858,000
"	"	Technical Assistance	38,000
1975	Taunton	Water Syst. & Rail Spur/Ind. Park (P.W.)	521,000
"	"	Site Clearance/Ind. Park (P.W.)	94,000
"	Fall River	Feasibility Study of Bulkhead Const. (T.A.).	89,000
"	New Bedford	Street and Sidewalk Imp. (P.W.)	347,000
"	Wareham	Tremont Dam Rest. (P.W.)	400,000
1977	New Bedford	Rehab/Piers 3 and 4 (P.W.)	314,000
"	Wareham	Industrial Park (P.W.)	419,000
1978	North Attleborough	Ind. Park Exp. (P.W.)	1,670,000
1979	Taunton	Roadway/Site Improvements to Industrial Park (P.W.)	1,687,000
"	New Bedford	Industrial Land Dev. (T.A.)	42,000
"	Wareham	Water Mains (P.W.)	615,000
1980	Fall River	State Pier	2,175,000
"	"	Planning (T.A.)	19,000
"	NEAMA	Import Compet. Assistance (T.A.)	169,000
1982	New Bedford/Dartmouth	Extension of Barnet Boulevard in the Industrial Park	592,015
1983	Fall River	Revolving Loan Fund	500,000
1984	SEED Corp.	Revolving Loan Fund	500,000
1986	SEED Corp.	Small Business Incubator	900,000
1987	Fall River	Revolving Loan Recapitalization	500,000
1987	New Bedford	Revolving Loan Fund	400,000
			<u>\$23,959,315</u>

SOURCE: U.S. Economic Development Administration, EDA Directory of Approved Projects.

P.W. - Public Works

T.A. - Technical Assistance





the  
district's  
economy

1000 1  
1000 1  
1000 1  
1000 1

1000 1  
1000 1  
1000 1  
1000 1

1000 1  
1000 1  
1000 1  
1000 1

1000 1  
1000 1  
1000 1  
1000 1

श्री  
सुखदेव  
सुखदेव

## A. INTRODUCTION

### 1. THE BROADER PICTURE

The Massachusetts economy is still booming. The state's unemployment rate is below the nation's for the tenth year in a row and the "miracle" is likely to continue, according to most forecasters. The forces which have boosted the economy for the past ten years are still in place--high technology; professional services and a "stable" population.

Massachusetts has just ranked sixth nationwide for its business climate in a study conducted by Grant Thornton, which is the 10th largest accounting and consulting firm in the country.

The study measures states for their attractiveness to manufacturers based on 21 factors. The top five factors used to rank business climate are:

- Cost of labor
- Availability of skilled and semi-skilled labor
- Unionization
- Workers's compensation insurance levels
- Productivity

According to the study, Massachusetts is one of the 10 states in which manufacturing employment exceeds the national average of 17 percent.

Massachusetts is viewed as one of the top 20 percent of states whose governmental and taxing policies are favorable to businesses, although the state was once nicknamed "Taxachusetts."

In 1987 the state had 597,000 persons employed in manufacturing, a drop of 51,000 from 10 years ago. Only 10 states, however, had more persons employed in manufacturing than Massachusetts. In five years the state's average manufacturing wage increased nearly 30 percent. This gave the state high marks for personal income growth, but low marks for employment costs.

Southeastern Massachusetts, the area covered by the District's boundaries, registered an unemployment rate of 6.5 percent in 1987 as compared to a rate of 11 percent in 1982.

The region is finally benefitting by the influx of high technology firms in the state. The northwestern part of the District has seen most of the region's



The region is finally benefitting by the influx of high technology firms in the state. The northwestern part of the District has seen most of the region's growth in this industry. The Fall River and New Bedford areas, however, still rely heavily on the textile and apparel industries.

The region, however, is beginning to diversify its industrial base. The area is reinvesting in rapid growth industries and focusing on its more mature industries.

The Route 128 "belt" which surrounds Boston has become saturated. The cost of land and construction is high and labor competition is intensive. The outer circumferential highway, Route 495, has become increasingly attractive. With a supply of labor, communities in the Route 495 "belt" have much potential for industrial development. Industrial parks in Mansfield, North Attleborough and Taunton have already experienced an inflow of high technology firms. Future growth is expected in industrial areas in Norton, Middleborough and Wareham as well. The spinoff impact is also being felt in Fall River and New Bedford.

High technology industry, however, is not the entire answer. Small business creation and growth is an area that needs to be addressed along with the region's more mature industries. It is important that the region maintain its manufacturing base, which represents almost half of all its jobs. Retention of existing industries like apparel, textiles, and jewelry and retraining to suit the needs of new companies will help stabilize the area's economy.

## 2. SOUTHEASTERN MASSACHUSETTS

### a. Population

The region is the second fastest growing area in Massachusetts. Although economically depressed for many years, the region has experienced population growth and is expected to continue growing into 1995.

From 1950 to 1980 the region grew by 30 percent in comparison to the state's 22 percent. For the 15 year period from 1980 to 1995, the region is expected to grow by another 11 percent.

Even the region's largest communities, the cities of Attleboro, Fall River, New Bedford and Taunton, are projected to show some population increases. Over the past 30 years, the cities of Attleboro and Taunton





have had static population growth and the cities of Fall River and New Bedford actually registered population losses. In the recent past, many of the region's smaller communities have become attractive as bedroom communities for large centers of employment such as Boston and Providence.

Although the region is experiencing population growth, the conditions of the overall population, especially those living in the cities have not improved substantially. In addition, population growth has put stress on public services. The region needs additional investment to address infrastructure improvements.

Education levels for Fall River and New Bedford are still well below the state's level. In Fall River, median school years completed increased from 8.8 in 1970 to 9.3 in 1980. In New Bedford median school years completed increased from 8.8 in 1970 to 9.5 in 1980. Although some improvement was registered over the 10 year period, these levels were well below the 12.6 median school years completed in 1980 in the state.

Likewise, poverty levels for the two cities are well above the state's average. In 1980, 14.8 percent of the persons living in Fall River and 16.2 percent of those living in New Bedford were below the poverty level. These figures were much higher than the state's 9.6 percent poverty level. Poverty levels for the City of Taunton and the towns of Middleborough and Wareham were also well above the state level.

b. Employment

For years the region has felt the impact of the exodus of the apparel and textile industries to the southern part of the nation. The cities of Fall River and New Bedford, which were major centers of apparel and textiles, became depressed mill towns.

1

TABLE 4

## POPULATION GROWTH

CITY/TOWN	1950	1960	1970	1980	% CHANGE 1950 TO 1980	AREA* SQ. MI.	POP./SQ. MILE 1980
ACUSHNET	4401	5755	7767	8704	97.77	19.09	456.04
ATTLEBORO	23809	27118	32907	34196	43.63	27.92	1224.84
BERKLEY	1285	1609	2027	2731	112.53	16.88	161.81
CARVER	1530	1949	2420	6988	356.73	42.98	162.61
DARTMOUTH	11115	14607	18800	23966	115.62	62.56	383.10
DIGHTON	2950	3769	4667	5352	81.42	22.27	240.34
FAIRHAVEN	12764	14339	16332	15759	23.46	12.36	1274.90
FALL RIVER	111963	99942	96898	92574	-17.32	38.22	2422.21
FREETOWN	2104	3039	4270	7058	235.46	35.11	201.01
LAKEVILLE	2066	3209	4376	5931	187.08	35.77	165.82
MANSFIELD	7184	7773	9939	13453	87.26	20.22	665.48
MARION	2250	2881	3466	3842	70.76	14.23	270.06
MATTAPOISETT	2265	3117	4500	5687	151.08	17.40	326.84
MIDDLEBOROUGH	10164	11065	13607	16404	61.39	72.53	226.17
NEW BEDFORD	109189	102477	101777	98478	-9.81	19.96	4932.76
N. ATTLEBOROUGH	12146	14777	18665	21095	73.68	19.67	1072.68
NORTON	4401	6818	9487	12690	188.34	29.02	437.33
PLAINVILLE	3000	3810	4953	5857	95.23	11.60	504.91
PLYMPTON	697	821	1224	1974	183.21	15.05	131.16
RAYNHAM	2426	4150	6705	9085	274.48	20.50	443.24
REHOBOTH	3700	4953	6512	7570	104.59	47.65	158.88
ROCHESTER	1328	1559	1770	3205	141.34	36.03	88.94
SEEKONK	6104	8399	11116	12269	101.00	18.89	649.53
SOMERSET	5866	12196	18088	18813	220.71	9.66	1948.27
SWANSEA	6129	9916	12640	15461	152.26	22.80	677.97
TAUNTON	40109	41132	43756	45001	12.20	46.23	973.46
WAREHAM	7569	9461	11492	18457	143.85	37.10	497.47
WESTPORT	4990	6641	9791	13763	175.81	57.87	237.83
DISTRICT TOTAL	403504	427282	479952	526363	30.45	829.54	634.53
BRISTOL COUNTY	--	398488	444301	474641	--	575.62	824.57
PLYMOUTH COUNTY	--	248449	333314	405437	--	687.88	589.41
MASSACHUSETTS	4690514	5148578	5689170	5737037	22.31	8123.83	706.20

SOURCE: 1950, 1960, 1970, &amp; 1980 U.S. CENSUS OF POPULATION.

\* AREA INCLUDES OPEN WATER.

1947年10月1日  
1947年10月1日

卷一百一十五

1970年  
1971年  
1972年

1991

1 1300

100

204

10	1
11	1
12	1
13	1

1

TABLE 5

## POPULATION PROJECTIONS

CITY/TOWN	1980	1990	1995	1980-1995 % CHANGE
ACUSHNET	8704	9222	9447	8.54%
ATTLEBORO	34196	35483	36345	6.28%
BERKLEY	2731	4334	5342	95.61%
CARVER	6988	12039	14056	101.14%
DARTMOUTH	23966	26135	26833	11.96%
DIGHTON	5352	5508	5649	5.55%
FAIRHAVEN	15759	15837	16133	2.37%
FALL RIVER	92574	89266	88987	-3.87%
FREETOWN	7058	8359	8712	23.43%
LAKEVILLE	5931	8808	11355	91.45%
MANSFIELD	13453	15228	15623	16.13%
MARION	3932	4387	4780	21.57%
MATTAPOISETT	5597	6103	6588	17.71%
MIDDLEBOROUGH	16404	18895	21221	29.36%
NEW BEDFORD	98478	96566	97461	-1.03%
NO. ATTLEBOROUGH	21095	25720	29040	37.66%
NORTON	12690	14627	15633	23.19%
PLAINVILLE	5857	6191	6262	6.91%
PLYMPTON	1974	2472	2744	39.01%
RAYNHAM	9085	9800	10134	11.55%
REHOBOTH	7570	9172	10162	34.24%
ROCHESTER	3205	4461	5111	59.47%
SEEKONK	12269	13118	13625	11.05%
SOMERSET	18813	17953	17747	-5.67%
SWANSEA	15461	16052	16445	6.36%
TAUNTON	45001	47119	48905	8.68%
WAREHAM	18457	21906	24318	31.75%
WESTPORT	13763	14251	14598	6.07%
DISTRICT TOTAL	526363	559012	583256	10.81%
BRISTOL COUNTY	474641	494505	509723	7.39%
PLYMOUTH COUNTY	405437	449379	492931	21.58%
MASSACHUSETTS	5737093	5891165	5976917	4.18%

SOURCE: 1980 U.S. CENSUS OF POPULATION AND POPULATION PROJECTIONS: 1990 AND 1995: CITIES AND TOWNS IN MASSACHUSETTS, BY THE MASS. INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH, AMHERST, MASS., MARCH 1988.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919  
920  
921  
922  
923  
924  
925  
926  
927  
928  
929  
930  
931  
932  
933  
934  
935  
936  
937  
938  
939  
940  
941  
942  
943  
944  
945  
946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990  
991  
992  
993  
994  
995  
996  
997  
998  
999  
1000



TABLE 6

## EDUCATION

CITY/TOWN	MEDIAN SCHOOL YEARS COMPLETED		% COMPLETED HIGH SCHOOL*		% COMPLETED 4+ YRS COLLEGE*	
	1970	1980	1970	1980	1970	1980
ACUSHNET	10.2	12.1	36.7	52	3	7
ATTLEBORO	11.8	12.4	49.4	63.5	7.8	12.9
BERKLEY	10.6	12.4	46.5	67.2	3.2	12
CARVER	10.1	12.5	41.8	77.9	3.8	10.2
DARTMOUTH	11.1	12.3	44.5	58.9	10.4	18.6
DIGHTON	12.1	12.5	52.4	69.2	8.7	11.2
FAIRHAVEN	10.8	12.2	40.1	56.8	6	8.3
FALL RIVER	8.8	9.3	25.6	35.3	4.3	6.7
FREETOWN	11.3	12.5	45	66.8	4.5	13.5
LAKEVILLE	12	12.6	49.7	74	7	15.9
MANSFIELD	12.3	12.7	63.5	79.6	9.6	18.3
MARION	12.6	13	66.7	80.6	21.1	30.3
MATTAPOISETT	12.6	12.9	70.8	78.2	18.3	28.7
MIDDLEBOROUGH	11.9	12.4	51.1	69.5	6.7	11.8
NEW BEDFORD	8.8	9.5	27.8	38.1	3.7	6.2
N. ATTLEBOROUGH	12.1	12.5	54.4	71.6	9.3	15.5
NORTON	12.1	12.6	52	73	9.9	17
PLAINVILLE	12.3	12.6	59.2	74.7	8	15.6
PLYMPTON	11.6	12.8	66.8	84.5	18.3	20.4
RAYNHAM	12.3	12.6	61.9	75.2	11.2	17.2
REHOBOTH	12.1	12.6	55.5	73.9	8.6	17.2
ROCHESTER	10.4	12.5	44.9	70.2	6.5	15.3
SEEKONK	12.1	12.6	53	70	9.6	18.2
SOMERSET	11.8	12.3	48.6	59.2	9.3	12.3
SWANSEA	11.5	12.4	45.9	61.7	5.7	14
TAUNTON	10.7	12	41.1	51.4	5	8
WAREHAM	11.8	12.3	49	64.5	6.1	9.7
WESTPORT	10.4	12.2	36.9	57.3	5.4	14.9
BRISTOL COUNTY	10.3	12.1	38.1	52.6	6	10.8
PLYMOUTH COUNTY	12.4	12.7	62.9	77.1	11.4	17.6
MASSACHUSETTS	12.2	12.6	34.9	72.1	12.6	20

\* PEOPLE IN COMMUNITY 25 YRS AND OVER.

SOURCE: 1970 &amp; 1980 U.S. CENSUS OF POPULATION.

[illegible]

In the past, the region has been removed from the growth occurring in the Boston area and Cape Cod. People could find affordable housing and good quality of life in the area, yet have accessibility to major growth areas such as Boston or the Cape. People moved to the region and commuted to Boston or the Providence Metropolitan areas for jobs.

The 1980 U.S. Census shows that in almost half of the region's towns, 75 percent or more of the population works out of town. In the cities, close to 10 percent of the population commutes 30 minutes or more to work. Most of the towns have a higher percentage of commuters traveling 30 minutes or more. The fact, however, that as many as 18,000 people commute 30 minutes or more from Fall River and New Bedford for jobs elsewhere shows that these centers of population do not provide the jobs needed by their residents.

The region's unemployment situation has improved considerably since 1982 when double digit rates were quite common for most communities. By 1987, the region as a whole registered a 6.5 percent unemployment rate and the cities of Fall River and New Bedford had unemployment rates of 6.8 and 6.1 respectively. These rates were still higher than the state's and the nation's. Part of the reason was heavy reliance in mature and recession prone industries such as apparel and textiles. The City of New Bedford, which has one of the largest fishing ports in the nation, also has been impacted by the fluctuation occurring in the fishing industry.

The manufacturing sector as a whole continued to lose employment while sectors like services, and retail and wholesale continued to grow. Industries like jewelry, apparel and textiles continued to lose jobs and there weren't enough new industries to replace those job losses. The net result, as discussed above, has been that many residents of the region continue to commute to larger metropolitan areas such as Boston and Providence for jobs.

With the completion of Interstate 495 in 1984, the situation has begun to change. Cities like Fall River and New Bedford, however, still have to address the decline of their major mature industries, and the replacement of lost jobs.

[illegible]

TABLE 7

## EMPLOYMENT AND UNEMPLOYMENT

## ANNUAL ADJUSTED AVERAGES

COMMUNITY	LABOR FORCE		EMPLOYMENT		UNEMPLOYMENT RATE	
	1986	1987	1986	1987	1986	1987
Acushnet	4,904	5,071	4,700	4,863	4.2	4.1
Attleboro	18,657	18,063	17,626	17,211	5.5	4.7
Berkley	1,313	1,690	1,242	1,619	5.4	4.2
Carver	3,063	4,559	2,903	4,407	5.2	3.3
Dartmouth	12,877	13,575	12,272	13,019	4.7	4.1
Dighton	2,673	2,576	2,507	2,488	6.2	3.4
Fairhaven	7,997	7,853	7,585	7,498	5.2	4.5
Fall River	43,387	42,612	40,254	39,730	7.2	6.8
Freetown	3,735	4,166	3,551	4,006	4.9	3.8
Lakeville	2,914	3,567	2,788	3,502	4.3	1.8
Mansfield	7,310	8,242	7,158	8,044	2.1	2.4
Marion	1,969	1,982	1,823	1,919	7.4	3.2
Mattapoisett	3,068	3,114	2,919	3,029	4.9	2.7
Middleborough	7,706	8,133	7,260	7,805	5.8	4.0
New Bedford	48,610	46,755	45,145	43,894	7.1	6.1
North Attleborough	11,400	12,049	10,813	11,499	5.1	4.6
Norton	6,931	7,494	6,647	7,277	4.1	2.9
Plainville	3,162	3,186	2,995	2,972	5.3	6.7
Plympton	973	1,126	926	1,088	4.8	3.4
Raynham	4,837	5,098	4,685	4,966	3.1	2.6
Rehoboth	3,944	4,155	3,711	3,982	5.9	4.2
Rochester	1,608	1,930	1,537	1,893	4.4	1.9
Seekonk	6,634	6,328	6,224	6,169	6.2	2.5
Somerset	10,090	9,722	9,554	9,357	5.3	3.8
Swansea	7,967	8,079	7,566	7,808	5.0	3.4
Taunton	21,798	21,471	20,594	20,538	5.5	4.3
Wareham	10,197	9,914	9,570	9,480	6.1	4.4
Westport	6,907	6,970	6,453	6,639	6.6	4.7
District	266,631	269,480	251,008	256,702	5.8	6.5
Massachusetts					3.8	3.2
U.S.A.					7.0	6.2

SOURCE: Massachusetts Division of Employment Security. "Job Market Research", 1988

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	



Although still relying heavily on industries severely impacted by recessions, the District has been experiencing new development. Many attributes have made the region attractive to businesses. Some of these include:

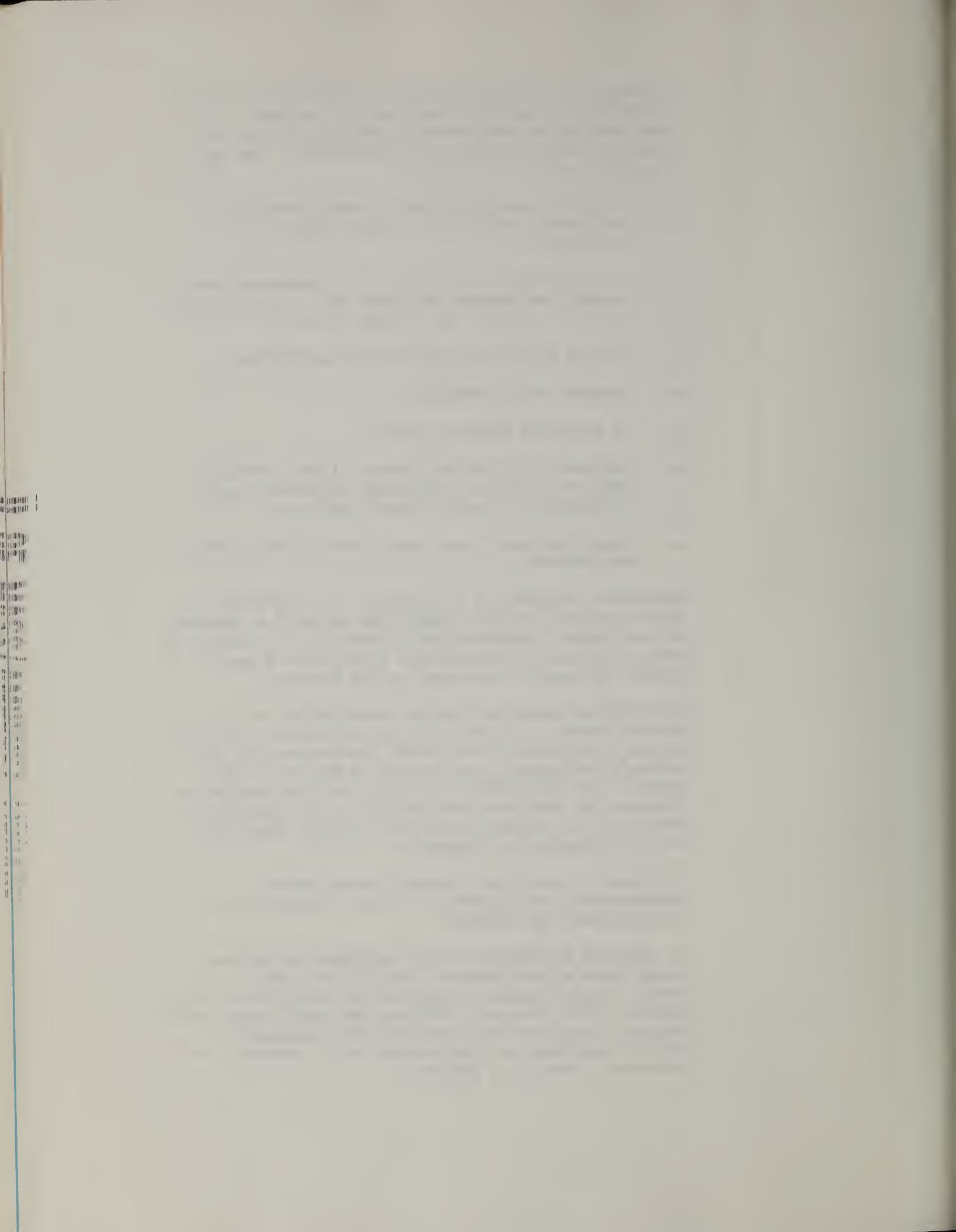
- Strategic location close to major centers of employment, education, health culture and recreation;
- An unparalleled quality of life combining rural living, New England heritage, and a coastline with excellent beaches and sailing harbors;
- Rapidly growing population and labor force;
- Abundant water resources;
- An excellent highway network;
- Availability of prime industrial and commercial land and buildings, including industrial parks strategically located along I-495; and
- Major deep water port facilities in Fall River and New Bedford.

Employment information by industry is provided by the County Business Patterns published by the U.S. Bureau of the Census. Although the information is provided by county instead of municipality it provides a good picture of what is happening in the District.

The District covers all of the municipalities in Bristol County with the exception of Easton. All four of the District's cities, which provide most of the region's employment, are located in Bristol County. These cities are Attleboro, Fall River, New Bedford and Taunton. In addition, some of the larger industrial towns are also located in Bristol County--Mansfield, North Attleborough, Dartmouth.

In Plymouth County the District covers seven communities. The largest in terms of employment are Middleborough and Wareham.

As outlined in Table 8, total employment in Bristol County grew by 20.4 percent from 1977 to 1986. In terms of actual numbers, most of the growth occurred in services (52.1 percent), followed by retail trade (50.4 percent), contract construction (148.5 percent), finance insurance and real estate (45.3 percent), and wholesale trade (24.1 percent).



Manufacturing, which provided 49.6 percent of all employment in 1977 had declined 6.9 percent by 1986. In 1986 manufacturing provided 38.4 percent of all employment.

Service employment grew by 52.1 percent from 1977 to 1986. In 1977 service employment represented 15.7 percent of all employment. By 1986 it represented 19.9 percent of all employment. Some of the impressive services employment growth occurred in business and educational services. Health services which represent most of the employment in this sector continued to grow at a healthy pace.

In comparison to Bristol County, Plymouth County showed a much healthier economy with total employment growth of 62.3 percent from 1977 to 1986. In all major categories Plymouth County's employment growth surpassed that of Bristol County.

In Plymouth County, however, the majority of the employment was in retail trade followed by services and manufacturing. The fastest growing of the three sectors was services. In Bristol County the majority of the employment was in manufacturing following by retail trade and services. The fastest growing of these sectors was also services.

In terms of manufacturing employment for Bristol County, most of the employment is in apparel followed by fabricated metal, miscellaneous manufacturing (mostly jewelry, silverware and plated ware), and textiles. Most of these industries registered employment losses from 1977 to 1986 with the exception of fabricated metal, which grew by 88.8 percent.

In addition to fabricated metal, some smaller industries such as non-electrical machinery, primary metal, rubber and plastics, printing and publishing and instruments also registered some growth.



TABLE 8  
EMPLOYMENT BY INDUSTRY

INDUSTRY	BRISTOL COUNTY			PLYMOUTH COUNTY		
	77	86	% CHANGE	77	86	% CHANGE
TOTAL	145,953	175,659	20.4	74,768	121,321	62.3
• Agriculture, Forestry Fisheries (07-09)	1,457	1,327	(8.9)	336	728	116.7
• Mining (14)	66	86	(30.3)	66	145	119.7
• Contract Construction (15-17)	3,191	7,931	148.5	2,368	7,114	200.4
• Manufacturing (20-39)	72,452	67,426	(6.9)	19,286	21,771	12.8
• Transportation, Utilities (40-49)	7,266	6,622	(8.9)	5,132	5,871	14.4
• Wholesale Trade (50-51)	7,208	8,948	24.1	4,030	7,579	88.1
• Retail Trade (52-59)	26,076	39,213	50.4	24,633	39,229	59.3
• Finance, Insurance Real Estate (60-65)	5,191	7,543	45.3	3,560	7,255	102.9
• Services (70-89)	22,967	34,924	52.1	15,267	30,126	97.3
-Hotels (70)	735	798	8.6	472	628	33.1
-Personal (72)	1,996	2,233	11.9	999	1,514	51.6
-Business (73)	1,426	3,893	173.0	1,152	4,946	329.3
-Auto Repair (75)	634	1,172	84.9	603	1,039	72.3
-Amusement & Rec. (79)	755	1,329	76.0	706	1,221	72.9
-Health (80)	11,481	14,400	25.4	7,332	12,001	63.7
-Educational (82)	1,162	2,887	148.5	574	898	56.4
-Social (83)	1,837	2,729	48.6	1,118	3,109	178.1
-Membership Org. (86)	1,569	2,436	55.3	931	1,708	83.5
-Miscellaneous (89)	408	1,413	246.3	416	1,796	331.7

SOURCE: U.S. Bureau of the Census. County Business Patterns: Massachusetts, 1977 and 1986.





TABLE 9  
BRISTOL COUNTY  
MANUFACTURING EMPLOYMENT

INDUSTRY	EMPLOYEES		% CHANGE	ESTABLISHMENTS	
	77	86		77	86
MANUFACTURING (20-39)	72,452	67,426	(6.9)	980	1,024
• Food Products (meat, dairy, bakery fish)	2,690	2,406	(10.6)	78	72
• Textile Products (22) (weaving, knitting, finishing)	7,175	6,083	(15.2)	61	52
• Apparel & other (23) (men's, women's, children, curtains)	17,596	14,681	(16.6)	163	144
• Lumber & Wood Prod. (24)	474	648	36.7	28	36
• Furniture & Fixtures (25)	209	158	(24.4)	10	16
• Paper & Products (26)	1,048	1,184	12.9	19	22
• Printing & Publishing (27)	2,388	2,532	6.0	68	89
• Chemicals & Prod. (28)	549	444	(19.1)	19	15
• Rubber & Plastic Prod. (30)	3,083	3,202	3.9	35	45
• Leather & Prod. (31) (footwear, handbags)	1,947	960	(51.4)	14	11
• Stone, Clay & Glass (32)	661	417	(36.9)	25	24
• Primary Metal (33)	2,793	3,087	10.5	33	28
• Fabricated Metal (34) (hardware, bolts, stampings)	4,531	8,554	88.8	102	114
• Machinery, non-electrical (35)	2,830	3,269	15.5	93	123
• Elect. & Electronic Equip. (36)	9,232	8,388	(9.1)	33	48
• Transportation Equip. (37)	1,043	759	(27.2)	17	18
• Instruments (38)	1,745	1,772	1.5	15	27

SOURCE: U.S. Bureau of the Census. County Business Patterns:  
Massachusetts, 1977 and 1986.

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

6.30(11) >  
6.30(11) >

c. Income

Income levels for the region increased from 1970 to 1980, but not enough to offset inflation. A more disturbing fact was that the percentage of persons below the poverty level actually increased in the cities of Attleboro, Fall River, New Bedford and Taunton.

The district average per capita income for 1985, as shown in Table 10, was \$10,002. This figure was well below the state average of \$12,510 and slightly lower than the U.S. average of \$10,798. The cities of Fall River, New Bedford and Taunton were well below both averages with \$8,050, \$8,156 and \$9,742 respectively.

Average weekly hours and earnings for the two largest cities in the region were the lowest of all major cities in the state. In May, 1988, average weekly hours for Fall River and New Bedford were 36.9 and 38.2 respectively compared to 40.9 for the U.S. and 40.8 for Massachusetts. Average hourly earnings followed the same trend. Fall River registered \$7.63 and New Bedford \$8.76 compared to \$10.14 for the U.S. and \$10.12 for Massachusetts.



TABLE 10

## INCOME

CITY/TOWN	---PER CAPITA INCOME**---			AVERAGE FAMILY INCOME		MED.FAM. INCOME	% PERSONS BELOW POVERTY LEVEL*	
	1975	1979	1985	1970	1980	1980	1970	1980
ACUSHNET	\$3891	\$6332	\$10165	\$9868	\$20520	\$19059	7.80	5.80
ATTLEBORO	4739	7081	11264	10904	20157	20459	6.20	7.00
BERKLEY	4160	6306	10476	11017	20272	19638	11.10	6.90
CARVER	3522	5984	10491	9619	19303	19348	12.80	6.40
DARTMOUTH	4937	6955	10853	10179	20748	19820	9.50	6.40
DIGHTON	4797	6838	10935	12132	23331	21548	6.40	5.20
FAIRHAVEN	4452	6390	9845	9649	17411	17794	7.10	6.70
FALL RIVER	3795	5197	8050	8289	13666	14810	13.80	14.80
FREETOWN	4460	6419	10373	10779	21819	21085	8.60	7.40
LAKEVILLE	4761	6603	11205	12114	22081	21067	7.20	8.50
MANSFIELD	4732	7287	12229	11648	21461	23348	6.50	5.30
MARION	5268	9371	15078	13300	27466	22485	8.90	7.50
MATTAPOISETT	5075	7975	13704	11647	25508	23430	7.70	5.40
MIDDLEBOROUGH	4134	5738	9694	9638	17298	18247	7.70	11.60
NEW BEDFORD	3922	5431	8156	8230	14112	14930	15.30	16.20
N. ATTLEBOROUGH	4676	7352	12137	11112	21075	22128	6.00	5.60
NORTON	4034	6307	10182	11497	20788	21346	8.60	6.20
PLAINVILLE	4679	7713	12546	11357	24733	21736	6.40	4.90
PLYMPTON	4747	6736	11376	11315	23165	21424	11.90	7.20
RAYNHAM	4985	7409	12167	13226	25099	23622	3.10	5.30
REHOBOTH	4563	7824	12934	11549	25930	22418	5.80	6.00
ROCHESTER	4594	6795	11583	10793	22137	20625	6.40	8.90
SEEKONK	5118	7688	12739	11248	23728	23615	5.10	3.40
SOMERSET	4685	7145	11237	10801	21208	21248	5.20	3.90
SWANSEA	4219	6692	10568	10277	20703	20318	6.50	4.00
TAUNTON	3987	6161	9742	9957	17464	18675	9.60	10.50
WAREHAM	3982	5943	10315	8998	15924	15442	12.80	12.00
WESTPORT	4183	6549	10849	10163	19786	19394	8.40	6.30
DISTRICT AVERAGE	4468	6794	10002	--	--	--	--	--
BRISTOL COUNTY	--	6252	9961	10319	20235	18334	10.50	10.10
PLYMOUTH COUNTY	--	6978	11817	12143	23614	21317	7.10	8.00
MASSACHUSETTS	--	7458	12510	12283	24105	21166	8.60	9.60

\* POVERTY LEVEL FOR AN INDIVIDUAL IN 1970 WAS \$1,840, IN 1980 IT WAS \$3,686. NO FIGURES ARE ADJUSTED FOR INFLATION.

\*\*1985 U.S. PER CAPITA INCOME AVERAGE WAS \$10,798.

SOURCE: 1970 & 1980 CENSUS OF POPULATION, AND U.S. BUREAU OF THE CENSUS ESTIMATES.





TABLE 11

Nonagricultural Wage and Salary Employment  
**AVERAGE HOURS AND EARNINGS OF PRODUCTION WORKERS BY INDUSTRY**  
**MANUFACTURING**

Area	Average Weekly Hours		Average Hourly Earnings	
	MAY 88	APR 88	MAY 87	MAY 88
UNITED STATES	40.9	41.0	40.9	\$10.14
MASSACHUSETTS	40.8	41.2	41.0	10.12
BOSTON	41.4	41.4	40.6	10.94
BROCKTON	40.2	40.6	40.8	8.47
FALL RIVER	36.9	37.3	37.9	7.63
LAWRENCE-HAVERHILL	40.1	40.2	40.5	10.09
LOWELL	42.6	42.3	43.2	10.01
NEW BEDFORD	38.2	37.8	38.3	8.76
SPRINGFIELD	42.7	42.9	42.1	9.67
WORCESTER	40.1	40.1	41.3	10.26
				10.30
				9.56
				9.14
				9.75



economic  
development  
centers

1

When Congress passed the Public Works and Economic Development Act of 1965, it envisioned economic development centers or growth centers as nuclei from which all economic activity would emanate. Growth centers became the anchors on which economic development districts would depend on to alleviate the economic distress of their redevelopment areas.

The District's growth centers, as designated by the U.S. Economic Development Administration, are the cities of Fall River, New Bedford and Taunton. These centers are characterized by population concentrations. They maintain a level of economic activity which generates jobs for people in nearby towns and they provide to a large extent the necessary social and economic services.

In 1987 the City of Fall River recovered considerably from the setback experienced in 1982 in terms of unemployment. The number of unemployed persons in the city increased from 8.6 percent in 1980 to 12.9 percent in 1982 and declined to 6.8 in 1987.

The City of New Bedford also showed improvement in its employment situation. The percentage of unemployed persons increased from 8.6 percent in 1980 to 14.3 percent in 1982 and declined to 6.1 in 1987. The City of Taunton experienced a jump in the unemployment rate from 7.9 percent in 1980 to 12.0 percent in 1982 and a decrease to 4.3 in 1987. The Taunton Myles Standish Industrial Park funded with EDA and state money has experienced tremendous growth over the past year. Located next to Interstate 495, the park is nearly full.

The cities of Fall River and New Bedford continued to depend on the apparel and related products and textile industries for the majority of the manufacturing jobs. For the three growth centers most of the employment growth since 1967 occurred in the service sector.

Although the population of southeastern Massachusetts is expected to grow at a higher rate than the rest of the state in coming years, the majority of the growth is expected to occur in smaller urban municipalities and rural communities which serve as "bedroom communities" for Boston and Providence.

The three cities still need to expand manufacturing sector opportunities. The cities of Fall River and New Bedford, especially, depend heavily on limited growth industries. The cities need to provide the kind of climate that will help revitalize these industries and help them expand. This effort should be coupled with





continued recruitment of high technology and other growth industries to broaden the industrial base.

In the recent past, the three cities have committed large amounts of federal and private funds to revitalize their central business districts and improve their infrastructures. These efforts will eventually result in substantial increases in wholesale/retail trade employment and in other sectors. Much of the economic situation experienced by the three cities in the past has been due to trends also taking place at the state and national level: cutbacks in many federal programs; the recessions of 1982, 1975 and 1974; double-digit inflation; a declining manufacturing sector; and costly energy supplies.

Economic activity, however, is not restricted to growth centers. The District has a number of older urban communities which have experienced substantial growth in the recent past. Of the four cities in the District, the City of Attleboro has the strongest economy. The city relies heavily on the metal products industry and boasts a large high technology firm, Texas Instruments, which employs approximately 5,000 people. In 1987 the city's unemployment rate was 4.7 percent. Attleboro provides almost twice as many jobs as the growth center of Taunton. The city is part of the Providence/Pawtucket Redevelopment Area and is oriented toward a larger nucleus, the City of Providence.

Another urban municipality providing substantial employment is North Attleborough. The North Attleborough Industrial Park, funded with EDA money, provides over 1,000 jobs. Mansfield has been growing substantially with the development of its Cabot, Cabot & Forbes Industrial Center. Middleborough also has much potential for growth with its new Commerce Park, Ocean Spray Headquarters, and strategic location next to I-495. Wareham is another community which has been experiencing growth and holds much potential for the future.

TABLE 12  
UNEMPLOYMENT RATES

	1982	1987
Attleboro	8.8	4.7
Fall River	12.9	6.8
New Bedford	14.3	6.1
Taunton	12.0	4.3
<hr/>		
District	11.0	6.5
Massachusetts	8.0	3.2
U.S.A.	9.5	6.2



potential  
for  
economic  
development



A. OPPORTUNITIES  
IN THE 1990's

According to Richard Kateley, executive vice president of Real Estate Research Corporation and author of Emerging Trends, most of the dynamics which will influence development in the next five to ten years are already in place. He points out development of a regional mall, for example, which may take seven to ten years.

In a recent article in Urban Land, Kateley outlines new demand patterns for industrial space, office market, hotels, and retail. The following are his conclusions.

INDUSTRIAL SPACE - In sizeable cities research and development space is overbuilt. Over the long term the greatest opportunity lies in business parks which provide high levels of common tenant amenities. University related technology parks are expected to fade over the next five years. Obsolete facilities will need to be replaced in the 1990's, as more manufacturers try to stay competitive in world markets, but the spending will be for owner occupied facilities, not speculative space. Warehousing and distribution markets will still be attractive in areas with strong residential and retail growth.

OFFICE MARKET - Rapid and large scale growth in office employment peaked in 1975 and 1985. In the future, demand for office will be significantly reduced due to a number of trends.

HOTELS - The record year for hotel construction was 1986 with over 90,000 rooms added to the nation's inventory. Estimates for 1987 were 60,000 new rooms. A strong economy and increases in conventions and meetings have played a major role in hotel growth. Growth, however, is expected to have peaked and we will see a slow down in the future.

RETAIL - Slower population growth, fewer household formation, and the aging of the baby boom generation will mean demand for fewer, smaller scale, and more specialized retail projects. Despite slower population and household growth, however, the retail outlook remains bright since half of the working population will reach their peak earning years in the 1990's. There will be room for both new retail space and at-home catalog shopping.

[illegible]



B. DISTRICT  
POTENTIAL

The District has a number of characteristics which still offer great potential for economic development. To reiterate, some of these characteristics include:

- Land--still plentiful and less expensive than the Boston metropolitan area.
- Water--abundant in comparison with the rest of the state and nation.
- Transportation--network offering excellent accessibility to all areas of the District and major areas such as Boston, Providence and Cape Cod. The area also boasts two major seaports, one in the City of Fall River and another in the City of New Bedford.
- Labor Force--a versatile labor force.
- Infrastructure--established urban areas with land, building space and other amenities for industrial and commercial development.

One of the District's best characteristics is its labor force. As analyzed in the section on the economy, there are still unemployed members of the labor force in the District's cities. The region still offers growing businesses a source of labor not available in the Boston area and other parts of the state.

Another strength is the cooperative spirit of "can do" shown by the region's communities. One example of this attitude is the establishment of the Southeastern Massachusetts Partnership. Another example is the way economic development groups work together for the improvement of the region.

The high technology industry has begun migrating to the region to draw upon the available labor pool. An especially attractive area is the Route 495 "belt", the outer ring to Route 128 around Boston. But the high technology industry is not the single answer. The region needs to concentrate on small business creation, where most new jobs occur.

At the local level there are a number of EDA projects which offer great potential for industrial development and the overall diversification needed by the District. Some of these projects include: the Myles Standish Industrial Park in Taunton on the periphery of Interstate 495, the Airport Industrial Park in Fall River, the New Bedford Industrial Park, the North Attleborough Park, and the Wareham Industrial Park.



River, the New Bedford Industrial Park, the North Attleborough Park, and the Wareham Industrial Park.

Since the late 1960's, EDA has provided grants which have prepared most of the industrial parks in the region. These parks have been very successful. EDA in effect has provided the seed money for industrial growth and jobs. Three of the region's parks are still looking to EDA for additional assistance to develop more space to attract growth industries. It is unlikely that the District's oldest cities will be able to finance these investments alone.

Small businesses which are responsible for most new job creation also need assistance to survive and grow. Support should include financial assistance along with other needed services such as those provided in an incubator.

The District will continue to assist in the development of all economic development-related projects offering good potential. Agriculture, fishing and tourism also offer great potential for the District. Cranberry farming, scalloping and tourism in general have been growing in the area and are expected to continue growing. Ongoing historical preservation and other urban revitalization efforts should have a direct beneficial impact on tourism.

A new area of potential is the creation of jobs by growing small businesses already located in the region. The District has many small businesses which could become the giants of tomorrow in the high technology field and other growth areas. By creating the South Eastern Economic Development (SEED) Corporation and staffing its operations, the District has provided a financing mechanism to assist these businesses to grow.

## C. CONSTRAINTS

Some of the District's worst constraints are somewhat beyond local or regional control but follow state and national trends. They include the higher cost of doing business in this part of the nation; generally higher tax rates and insurance premiums; costly and less available energy supplies; and high shipping costs due to distance from growing market areas.

More specific District constraints include:

- Manufacturing--a declining manufacturing sector,



- Mature Industries--a need to revitalize "mature" or declining industries such as apparel and related products and textiles.

A constraint which affects all Massachusetts communities is "Proposition 2 1/2". The lack of additional town revenues generated by new development of property is seen as a strong anti-growth effect of the statute. The proposition limits the tax levy to a 2.5 percent increase from each previous year. An increase in the tax base produced by a new development is absorbed into the general levy and the tax rate. The result is that a town has to share existing services with the new development, because no substantial additional revenues can be generated for the community.

Another constraint which is national in nature is the "Reagan Budget", which has cut EDA programs and other urban revitalization programs desperately needed by southeastern Massachusetts.

[illegible]

卷之四

1997-98  
1998-99  
1999-00

10-11-12

1-4-22

1  
2  
3  
4

10

1  
1  
1  
1  
1

1  
2  
3

1

100

1

1

1

1



strategy  
and  
implementation



A. PROGRAM AND  
PROJECT SELECTION

The existing economic development goal and objectives for the District were adopted October 26, 1983 by the SRPEDD Commission. They provide guidance for the District's work program and project selection process. They are:

GOAL

ECONOMY: Strengthen and diversify the region's economic base through the expansion of existing businesses and the attraction of new growth businesses which will create needed and better paying jobs; assist in preparing the region for its "re-industrialization" in terms of manpower training, financing incentives, governmental coordination and infrastructure development.

OBJECTIVES

1. Encourage the expansion of existing industries and the establishment of new industries by providing financing assistance (SEED, UDAG's, etc.), other support services and serving as an information resource for the region.
2. Provide technical assistance to local development, industrial development, community development corporations, chambers of commerce, and other local and regional economic development agencies.
3. Provide assistance to the private sector, especially in the areas of information and investment financing through SEED Corporation.
4. Make known the locational benefits of the region, such as the relatively plentiful and qualified labor, land and water; the coastal location; quality of life; and the good transportation network.
5. Provide for coordination of manpower training programs and needs of industry.

In August 1988, the Economic Development Committee also adopted a set of criteria for ranking projects submitted by municipalities and non-profit groups in the District. Table 13 outlines the criteria.

B. PROGRAM CONSIDERATIONS  
AND COURSE OF ACTION

Table 14 outlines the District's proposed program. It is a listing of projects which are of high priority for the region in its economic development strategy. Table 15 lists all projects in priority order as recommended by the Economic Development Committee and adopted by the District Commission in September 1988.

0-9  
A-Z

●

1011  
1212

93

...

441

197

1000  
- 1000  
1000

100

4

341.

041

1

1

18

1

1



1



1



TABLE 13  
PROJECT RANKING CRITERIA

1. Unemployment Rate	Pts.	
	0	10
	At or below U.S. Average ( 6.2 %)	1.5 times U.S. Average ( 9.3 %)
2. Per Capita Income	Pts.	
	0	10
	At or above U.S. Average (\$ 10,798 )	80% or less U.S. Average (\$ 8,638 )
3. Permanent Job Creation	Pts.	
	0	5
	0	500+
4. Construction Jobs Created	Pts.	
	0	5
	0	100+
5. Spinoff Jobs Creation	Pts.	
	0	5
	0	400+
6. EDA Investment/ Perm. Job	Pts.	
	0	5
	\$5000/ Job	Less than \$1000/Job
7. Private Investment Leveraged	Pts.	
	0	5
	None	500 % of EDA Invst.





TABLE 13  
CONTINUED

DISCRETIONARY CRITERIA (0-2)

1. GROWTH CENTER
2. INNOVATIVE PROJECT
3. STRENGTHENS MANUFACTURING
4. ASSISTS SMALL BUSINESS
5. REGIONAL IMPACT
6. OTHER



TABLE 14  
RANKING OF HIGH PRIORITY PROJECTS  
1988-1989

<u>PROJECTS RANKED</u>	<u>AVERAGE POINTS</u>
1. New Bedford Industrial Park Expansion	44.8
2. Taunton Myles Standish Industrial Park	39.2
3. Wareham - Industrial Park, Phase II	32.5
4. Taunton - Downtown Redevelopment	28.4

1000  
900  
800  
700  
600  
500  
400  
300  
200  
100  
0

TABLE 15

## PRIORITY PROJECTS

1988-1989

LOCAL PRIORITY	PROPOSED PROJECTS DESCRIPTION & LOCATION	RELATED GOALS*	FUNDING (in thousands)					INITIATION COMPLETION DATE	AGENCIES RESPONSIBLE (IF ANY)	ENVIR. IMPACT	NO. OF JOBS CREATED	
			NO. PRIORITY	FEDERAL	STATE	LOCAL	OTHER					ESTIMATED TOTAL COST
1	Industrial Park Expansion, New Bedford	1	1	EDA \$692	\$756		\$576	\$2,024	Apr. '89- Sept. '89	Industrial Foundation/ City		1,000+
2	Myles Standish Industrial Expansion, Taunton	1	2	EDA \$1,000			\$5,625	\$6,625	Apr. '89- Sept. '89	TDC		4,900
3	Wareham Industrial Park, Phase II	1	2	EDA \$200			\$50	\$250	Apr. '89- Sept. '89	Wareham EDIC		480
4	Taunton Downtown Revitalization	2	2	EDA \$1,000	\$4,700		\$1,000	\$6,700	Apr. '89- Sept. '89	City of Taunton		400

EDA=Economic Development Administration

TDC=Taunton Development Corporation

EDIC=Economic Development and Industrial Corporation





C. PLAN FOR  
IMPLEMENTATION

1. DISTRICT STRATEGY

a. Rationale

The overall purpose of the Public Works and Economic Development Act of 1965, as amended, is...

To provide for public works and development facilities, other financial assistance and the planning and coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.

The District program is funded under this legislation. Since its establishment in 1969, the District has developed projects and conducted other economic activities with EDA assistance in the struggle to improve the economic viability of the region. The focus of these activities has been twofold: planning efforts to facilitate public and private investment in the region and project specific development primarily in the region's ports and industrial parks.

Although the national recessions of 1974-1975 and 1982-1983 severely impacted the region's manufacturing base and hindered many of the District efforts, 1987 was a boom year. The unemployment rate continued to decline and the region experienced major development.

Southeastern Massachusetts, however, still trails behind other parts of the state and New England. This is partially due to the slower movement of high technology industries into the region.

In the Fall River and New Bedford areas, there is a high reliance on the apparel and textile industries. Historically these industries have not done well in recessionary times. Apparel and textiles have been and continue to be negatively impacted by foreign imports.

In the Attleboro area the jewelry industry faces the same plight as the apparel and textile industries. The area, however, has a more diversified industrial base than the Fall River or New Bedford areas.

The region, however, is beginning to diversify its industrial base. The area is reinvesting in rapid growth industries and export-oriented services.

With the Route 128 "belt" becoming saturated from labor competition, the Route 495 "belt" in the region



is perceived as increasingly attractive. The future of communities in the Route 495 "belt" looks bright in terms of industrial development and office market potential. Industrial parks in Mansfield, North Attleborough and Taunton have experienced an inflow of high technology firms. Future growth is expected in industrial areas in Attleboro, Fall River, New Bedford and Wareham as well.

In order for the region to follow in the steps of the state and New England, however, it must become aggressive in its approach to attract high technology and other growing industries. Conversely, it is important that the region maintain existing industries like apparel, textiles and jewelry, which represent almost half of all manufacturing jobs. The region must also make a concerted effort to help small business start-ups to survive and grow.

To put it simply, the District's major goal is to create jobs and revitalize the region's economy. Its strategy as alluded to in the preceding discussion is to pursue a double-pronged approach:

- Provide opportunities and create a favorable climate for existing businesses to expand, and
- Attract new growth industries which will help diversify the economic base of the region.

The strategy is based on the reality of economic development -- that the majority of business expansions come from existing businesses. The District, therefore, needs to revitalize its more mature industries -- apparel, textiles and jewelry, and help its small growth industries to expand.

On the other hand, the District also needs to diversify its economic base since its older industries are extremely susceptible to recessionary trends. So far the District has not benefitted substantially by the growth of high technology industries and other growing industries located close by in Massachusetts. It is not far-fetched to believe, however, that if the region can offer the incentives which growing industries seek, they will locate and expand in the area.

#### b. Project Implementation

The District's strategy is being implemented through the development of high priority projects listed in the OEDP. In the cities of Fall River and New Bedford, the District has worked to provide prepared industrial



space for existing industries to expand and for new industries coming into the region.

The District will continue to develop projects which meet its strategy. As projects are approved and funded by EDA, the District will continue to work with those involved to ensure timely completion and accomplishment of stated objectives. The District will provide the technical assistance needed to maximize the economic benefits gained by EDA investments.

A new focus for the District since 1982 has been small business financing and technical assistance. This effort continued to expand in 1987. Small business financing provided by SEED Corporation's "504 Program" and a SEED revolving loan fund capitalized with \$500,000 from EDA and another \$500,000 from the state continued in 1987. In addition, SEED worked on developing a small business incubator to provide flexible rental space and shared services for small start-up businesses.

The District has administered a project to assist businesses with proper management of industrial hazardous wastes and has also helped local companies reduce energy costs by marketing and managing an industrial energy audit program in conjunction with the Executive Office of Energy Resources. Both these projects help established businesses become more profitable.

## 2. TASKS AND PROPOSED ACTIVITIES

### a. Coordination/Outreach

The focus of all project development and coordination/outreach activities conducted by the District is the development of projects which will benefit the economic climate of the region and implement the District's strategy. This task will account for 70 percent of the total work effort.

1) OEDP Priority Projects--The District will continue to work on those projects listed in the OEDP to ensure that the proper steps are taken and that the coordination necessary for implementation is conducted. This year the District, through its financing arm, SEED Corporation, will continue to work on providing "incubator" space for start-up and young businesses in the region.

The rationale for the project is that small businesses with 20 employees or less create most of the new jobs in this country. Yet many of these businesses do not







have the space or support services necessary to survive. Last year over 600,000 new business corporations were formed. Seventy-five percent of these small businesses are expected to fail within the next two years. The entrepreneurs and job creators of tomorrow have many strikes against them -- lack of efficient space, lack of financing and lack of support from clerical to management assistance. In addition these businesses have little credibility operating out of garages and other substandard industrial space.

Since 1969, the District has worked with communities to establish five EDA-funded industrial parks. These parks have provided needed space to growing businesses. The "incubator" proposed by SEED will prepare small businesses for their next step - the industrial park. By providing needed support services and flexible space, from 300 to 5,000 square feet, the incubator will help small businesses to survive and grow into the next phase. Established incubators have found that only 15 percent of the small businesses located in such an environment fail. Incubators identify an area's human resources, then provide an environment that helps people become successful entrepreneurs.

2) Technical Assistance--An ongoing function of the District is to provide technical assistance to communities. Under special contracts the District has provided assistance to the cities of Fall River and New Bedford.

3) South Eastern Economic Development (SEED) Corporation--The District will continue to staff SEED Corporation. In the coming year staff hopes to package 10 applications for small business financing under SBA's "504 Program". Staff will also continue to provide financing to small businesses under EDA's Revolving Loan Fund Program. These applications should provide an average of 200 new jobs in the region.

In addition, the District staff will organize meetings of the Board of Directors, the Loan Review Committee and the Small Business Incubator Steering Committee. Staff will work on developing a small business incubator.

4) Ongoing Activities--Ongoing coordination activities will include meetings with and/or membership in the following groups: industrial development commissions; chambers of commerce; economic development staffs in New Bedford, Fall River, Attleboro, Taunton, Middleborough and Wareham; private industry councils; Bristol County Development Council; Plymouth County Development Council; College



of Business and Industry, Southeastern Massachusetts University; Center for Economic Development, University of Massachusetts; Massachusetts Economic Development Council; the Small Business Development Center and the Southeastern Massachusetts Partnership. Ongoing coordination with the Economic Development Representative for EDA and with state agencies involved in economic development activities will also continue.

5) Workshops--Co-sponsor with the chambers and other economic development agencies in southeastern Massachusetts workshops as necessary. The purpose of the workshops will be to inform local officials and others involved in economic development about new programs and timely issues.

Whenever possible, the District will get involved in more general coordination/outreach activities which will lead to project development. The District staff will attend workshops and conferences aimed at industrial development commissions, chambers of commerce, local officials and others involved in economic development. The District will set up displays and provide handouts in order to familiarize workshop and conference attendees with the District's economic development activities and EDA programs.

b. Reports

The District will prepare those reports required by EDA as part of the planning grant agreement and also conduct studies, as noted below. This task will account for 20 percent of the total work effort.

1) Overall Economic Development Program--Prepare the annual progress report of the OEDP to maintain EDA eligibility as a District. As part of the OEDP, maintain a current analysis of economic trends and developments, and prepare a strategy to meet economic needs and concerns. The strategy consists of two aspects: a staff work program focusing on activities which will meet identified needs, and development of projects to improve the economic needs identified in the OEDP. Involve as many parties affected by the OEDP as possible in the process of developing the progress report.

2) Semi-Annual Reports--Prepare two semi-annual reports to keep EDA abreast of ongoing activities and progress.

3) Fact Book--Update annual data in the fact book and revise industrial and commercial survey data according



to new development. Preparation of the original fact book was funded under the fiscal year 1980 grant. The purpose of the fact book is to provide developers with an overview of the region and its assets for economic development. The fact book, in effect, enables developers to focus on specific communities which meet their needs. It provides detailed economic development information which is currently unavailable through other sources.

4) Newsletter--Continue to prepare an economic development section to the District newsletter. The purpose of the section is to keep industrial development commissions, chambers of commerce, local officials and others involved in economic development informed about the District's EDA program and current economic development activities.

5) Annual Reports--Prepare an annual report for the District to inform member cities and towns of District activities for the previous year.

6) Fact Sheets--Develop fact sheets and brochures on various issues and new programs as necessary to inform local communities.

c. Administration

Under administration fall such general activities as developing monthly work programs; maintenance of files; meetings of economic development staff and other District staff for coordination purposes. Major administration activities will account for 10 percent of the total work effort. They include:

1) Economic Development Committee--Continue to broaden present base as economic development needs and interests dictate; organize preparation of agenda, minutes, handouts and presentations.

2) Commission--Keep District Commission (official OEDP Committee) aware of recent happenings in economic development; report on Economic Development Committee actions and recommendations; review applications for economic development projects originating with the region (formerly under Office of Management and Budget Circular A-95); review industrial revenue bond applications under the Massachusetts Industrial Finance Agency program.

3) Requests for Information--Provide information on economic trends in the region and other statistical data as requested by developers, municipalities, community groups and individuals.



THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1964  
JAMES H. HARRIS  
JAMES H. HARRIS  
JAMES H. HARRIS







MASS. Y3. SR1/31989

✓

# OVERALL ECONOMIC DEVELOPMENT PROGRAM

for  
southeastern massachusetts

prepared by  
southeastern regional planning  
and economic development district

1989



SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT  
88 BROADWAY TAUNTON, MA 02780

1988

ANNUAL REPORT

and

1989

PROGRAM PROJECTION

OF THE

OVERALL ECONOMIC DEVELOPMENT PROGRAM

JUNE 1989





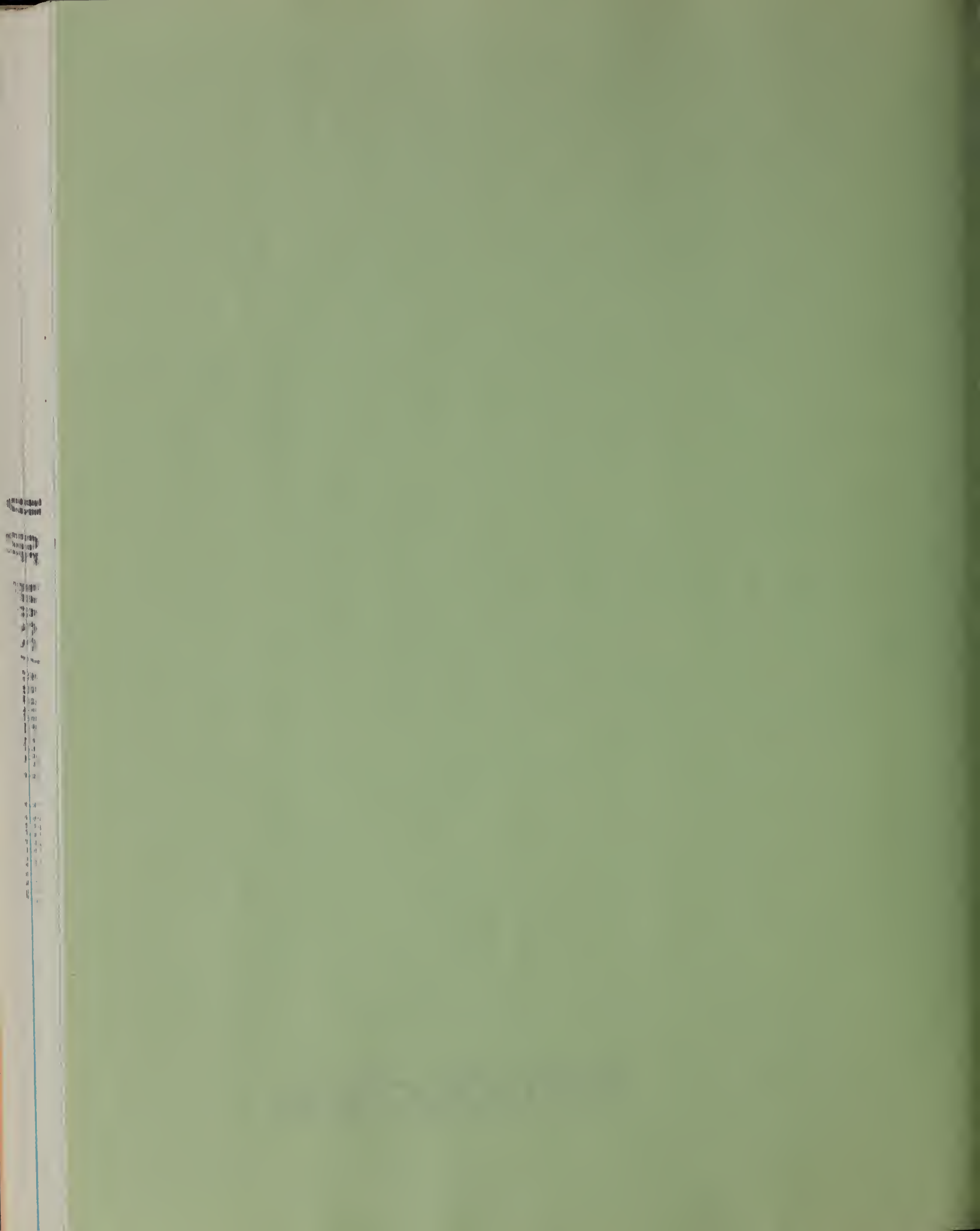
## CONTENTS

	<u>PAGE</u>
I. INTRODUCTION.....	1
II. ADMINISTRATION.....	3
A. AREA DESIGNATION AND PARTICIPATING GOVERNMENTS.....	3
B. DISTRICT ORGANIZATION.....	4
III. DEVELOPMENT EFFORTS.....	11
IV. THE DISTRICT'S ECONOMY.....	14
V. ECONOMIC DEVELOPMENT CENTERS.....	26
VI. POTENTIAL FOR ECONOMIC DEVELOPMENT.....	28
A. OPPORTUNITIES IN THE 1990'S.....	28
B. DISTRICT POTENTIAL.....	29
C. CONSTRAINTS.....	30
VII. STRATEGY AND IMPLEMENTATION.....	32
A. PROGRAM AND PROJECT SELECTION.....	32
B. PROGRAM CONSIDERATIONS AND COURSE OF ACTION.....	32
C. PLAN FOR IMPLEMENTATION.....	37

## APPENDICES



# introduction



The mission of the Economic Development Administration (EDA) under the U.S. Department of Commerce is to enhance the national economy.\* EDA assists communities and areas experiencing economic distress to help themselves achieve lasting improvement. EDA's role is to support the effort of local people in devising their own programs to solve problems.

The program developed by local people to address an area's problems is the Overall Economic Development Program (OEDP). The OEDP is both a document and a process--a process of area self-analysis, planning, and action to create new economic activity and improve community facilities and services.

The Public Works and Economic Development Act of 1965, as amended, requires that redevelopment areas and economic development districts such as SRPEDD formulate an OEDP. EDA must approve the OEDP prior to designating redevelopment areas and economic development districts as qualified to receive assistance.\*\*

Continued eligibility of an EDA-designated redevelopment area or economic development district is contingent upon regular updating of the OEDP. This may be accomplished by submitting to EDA an Annual OEDP Report and Program Projection such as this one. Redevelopment areas located in a designated economic development district may satisfy this requirement by concurring with the district's annual report covering the area's activities.

An OEDP identifies assets and liabilities. It sets a course of action for dealing with problems created by unemployment and a sagging economy. Preparation of the OEDP is a process guided by a committee representing economic development interests in the area. Without this process efforts to tackle problems become disconcerted.

Beyond making it easier for an area to address economic problems, the OEDP also makes the area eligible for EDA funding. In southeastern Massachusetts, SRPEDD receives EDA funding to prepare an OEDP which makes six redevelopment areas eligible for EDA grants.

---

\*U.S. Department of Commerce, Economic Development Administration. EDA Handbook, June, 1977.

\*\* Guide for District Overall Economic Development Program, May, 1977.

Because SRPEDD updates the OEDP annually to maintain eligibility as an economic development district, member communities are also eligible for ten percent bonuses on the total cost of public works projects.

The Annual OEDP does not include the detail of the original SRPEDD OEDP published in 1969. It provides, however, a review of accomplishments and significant changes in the economy during the past year and proposes a strategy to meet the new situation. This is a continuous and dynamic process.

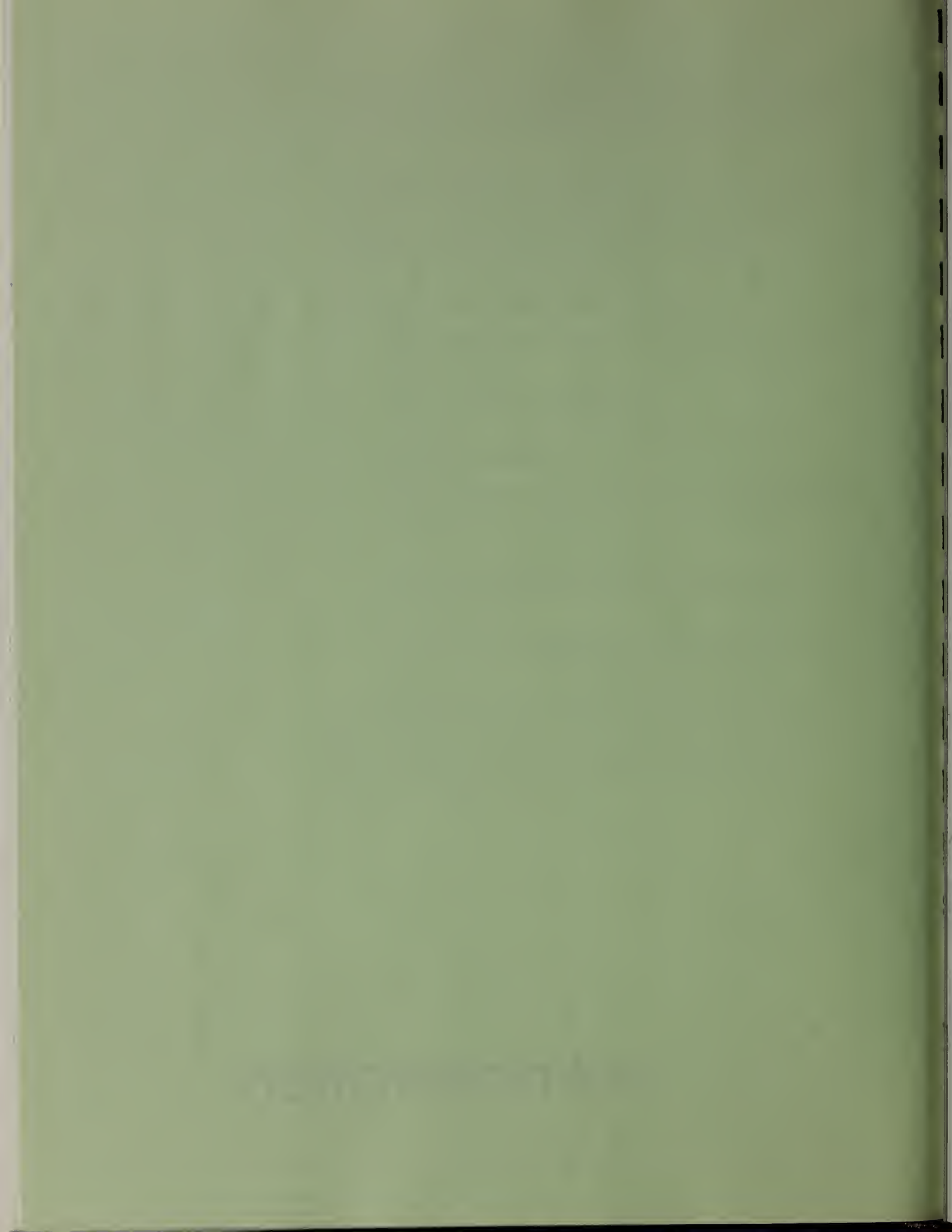
The annual OEDP contains these elements:

- Fact gathering to assure understanding of current developments;
- Identification of potentials;
- Appraisal of urban places suitable to serve as centers for growth;
- Establishment of goals and intermediate objectives to direct development activities and measure progress;
- Devising a strategy for development--a plan to achieve goals and objectives (a listing of projects); and
- Provision of a work program proposing methods for implementation of the strategy and projects.

Beyond making the area eligible for EDA funding, the most important aspect of the annual OEDP, by far, is the listing of projects in the region to be funded by EDA. Projects are ranked in order of priority. The listing provides guidance to EDA on which projects should be funded first.



administration



A. AREA DESIGNATION  
AND PARTICIPATING  
GOVERNMENTS

On November 13, 1969, the Southeastern Regional Planning Commission was designated by the Economic Development Administration (EDA) as an Economic Development District (EDD) under Title VI of the Public Works and Economic Development Act of 1965.

The purpose of an Economic Development District is to foster successful economic development on a large scale by grouping together economically distressed and healthy areas--redevelopment areas and economic development centers or growth centers.

The District encompasses portions of three counties, twenty-eight municipalities and six redevelopment areas. The District's county membership includes: all of the communities in Bristol County with the exception of the Town of Easton; the towns of Carver, Lakeville, Marion, Mattapoisett, Middleborough, Plympton, Rochester and Wareham in Plymouth County; and Plainville in Norfolk County.

Four of the District's redevelopment areas--Bourne/Wareham/Rochester, New Bedford, Providence/Pawtucket, and Plymouth--were designated in 1966. The Fall River Redevelopment Area was designated in 1974. The Town of Mansfield is presently not included within a redevelopment area.

These redevelopment areas were designated on the basis of "substantial and/or persistent unemployment."\* Redevelopment area designation enables an area to be eligible for the whole range of programs authorized by the Public Works and Economic Development Act.

Redevelopment Areas were originally established on the basis of labor market area (LMA) information furnished by the Massachusetts Division of Employment Security (DES). Since designation, however, DES has changed the labor market area boundaries. The Bourne/Wareham/Rochester LMA has been eliminated, and Wareham and Rochester, both District communities, have been incorporated into the Plymouth and New Bedford LMA's respectively.

---

\*U.S. Department of Commerce, Economic Development Administration. Designated Redevelopment Areas under the Public Works and Economic Development Act of 1965, as Amended, October 1, 1978.

This new composition presents a problem by interrupting the continuity needed for trend analysis. Furthermore, the new labor market area boundaries are not similar to the federally designated Standard Metropolitan Statistical Areas (SMSA's) in the District--Fall River and New Bedford. Figure 1 shows the present labor market areas in the District for which DES provides information.

For the purposes of manpower planning DES has also established Service Delivery Areas (SDA's). Much of the statistical information is now provided for these geographic divisions.

The District also has two designated economic development centers (EDC's)--the cities of Fall River and Taunton--and a redevelopment center (RC), the City of New Bedford. These growth centers are the economic activity nuclei of their respective redevelopment areas.

Redevelopment Centers are those which are recognized as falling within a designated redevelopment area. Unlike economic development centers there is no limit on the population of RC's, which may be in excess of 250,000 as of the last federal census.

#### B. DISTRICT ORGANIZATION

The Commission of the Southeastern Regional Planning and Economic Development District serves as the Overall Economic Development Program (OEDP) Committee for the District. The committee sets policy and provides guidance on all matters relating to the economic development of the District. But, because of its size, it relies on a smaller advisory committee, the Economic Development Committee (EDC) for specific recommendations.

The EDC is responsible in conjunction with the OEDP Committee for developing criteria, and ranking economic development projects in the District. The committee also guides and assists the overall staff effort to prepare and implement the District's economic development program.

Membership lists for both committees are included in this section.



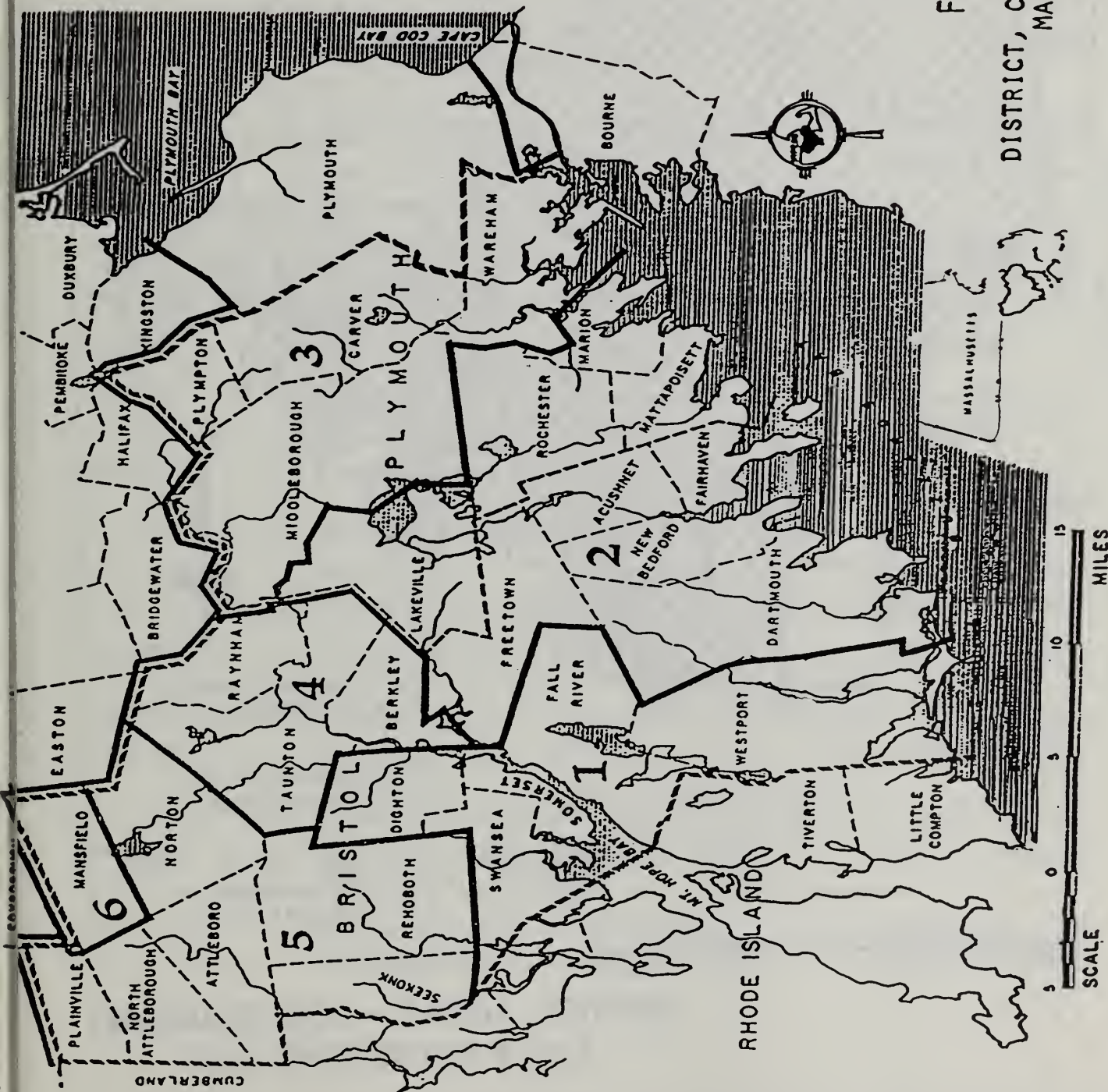


FIGURE 1

DISTRICT, COUNTIES AND LABOR  
MARKET AREAS

# LEGEND

- DISTRICT BOUNDARY
- COUNTY BOUNDARY
- TOWN BOUNDARY
- LABOR AREA BOUNDARY

1. FALL RIVER LMA
2. NEW BEDFORD LMA
3. PLYMOUTH LMA
4. TAUNTON LMA
5. PROV./WARW./PAWT. LMA
6. NO LABOR AREA

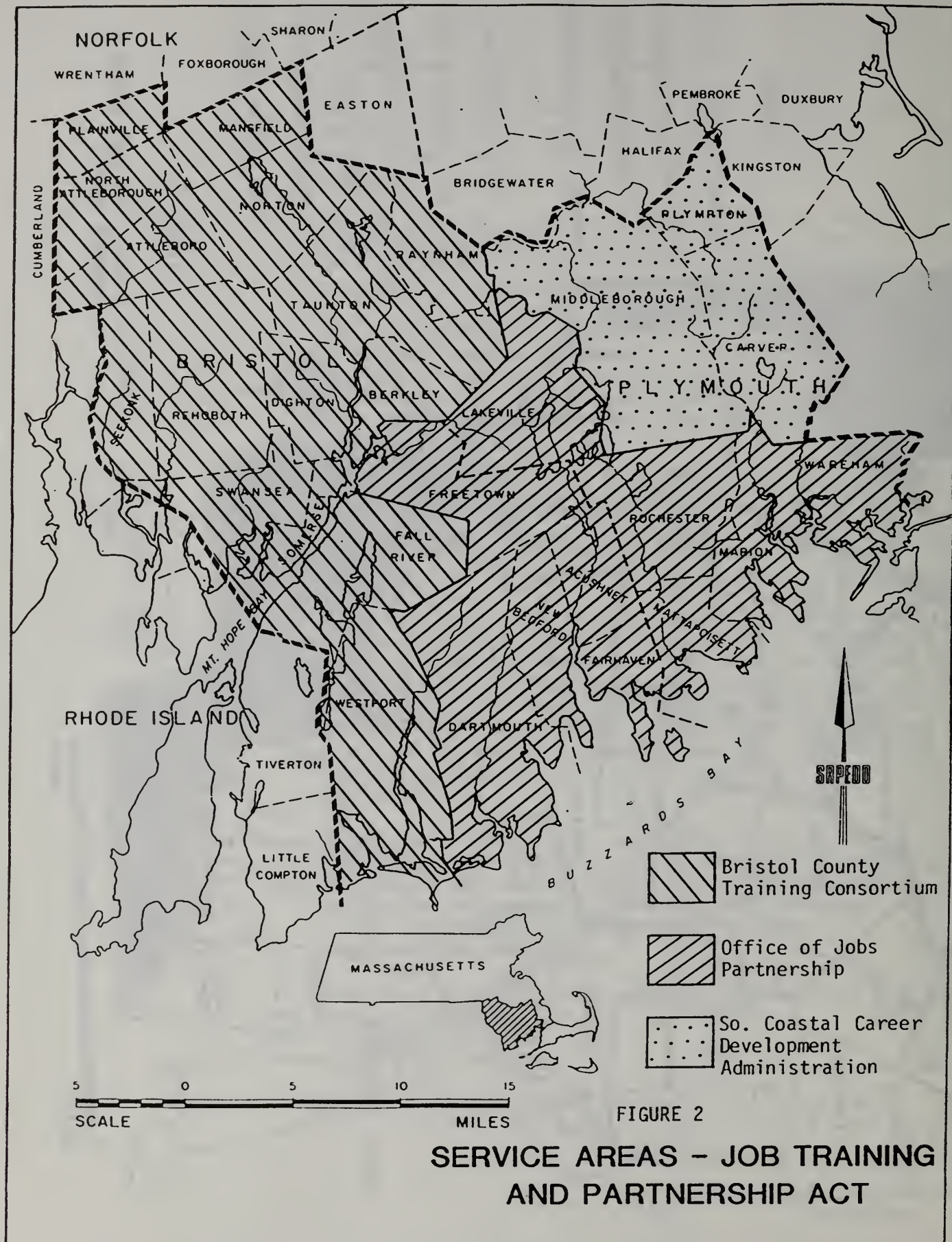




TABLE 1  
COMMISSION MEMBERS

1988-1989

CITY/ TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
Acushnet	Lawrence Mulvey*	Commonwealth Electric/ Selectmen	Business/Gov't.
	Richard Ellis*	Planning Board	Local Planning
Attleboro	William Woloshyn		
	Robert Mawney*		Local Planning
Berkley	John Holland*	Selectmen	Government
	Byron Holmes*	Planning Board	Local Planning
Carver	John Mickevich	Mass. Transit	Bus./Local Plng
Dartmouth	Lorri-Ann Miller	Dental Assistant	Business/Gov't.
	Basil Castaldi*	Education Consultant/ Planning Board	Education/Local Planning
Dighton	Allan Campbell	Prof. of Civil Engineering	Education
	Manuel Ferreira*	Restaurateur/ Planning Board	Business/Local Planning
Fairhaven	Raymond Fleurent*	Contractor/Planning Board	Business/Local Planning
	Nicholas Tangney		
Fall River	Dan DeCarlo	City Planner	Local Planning
	Robert Alves*	Planning Board	Local Planning
Freetown	Charles Boynton*	Planning Board	Local Planning
Lakeville	Luke Leonard, Jr.	Teacher	Education
Mansfield	Michael McClanahan*	Planning Board	Local Planning
	Kelli Baker		
Marion	Loretta Schaffer*	Selectwoman	Government
	Franklin Winters*	Planning Board	Local Planning

\* Elected Official

CITY TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
Mattapoissett	Robert Black Barry Denham*	Planning Board	Local Planning
Middleborough	Larry Carver Joseph Freitas, Jr.*	Planning Board	Local Planning
New Bedford	Alfred Lima	City Planner	Government
North Attleborough	Krista Paynton Patricia Redding*	Planning Board	Local Planning
Norton	Alan Fracalosi* John Tyler*	Planning Board Planning Board	Local Planning Local Planning
Plainville	Andrea Soucy*	Teacher/Plng. Bd.	Education/Gov't
Plympton	Lee Johnson William Slater*	Teacher Planning Board	Education/Gov't Planning
Raynham	Emeline MacDonald Henry Ellis*	Retired Planning Board	Government Local Planning
Rehoboth	Suzanne DiPietro Donna McCombs*	Business Owner Planning Board	Business/Gov't. Local Planning
Rochester	George Bare	Industrial Engineer	Business/Gov't.
Seekonk	Charles Terzian Robert Lombardi*	Planning Board	Local Planning
Somerset	Donald J. Hussey Raymond McConnell*	Advertising Planning Board	Business/Gov't. Local Planning
Swansea	Charles Baldwin*	Planning Board	Local Planning
Taunton	William Fitzgerald John L. Viveiros*	Community Dev. Dir. Bacteriologist	Government Health/Local Plg
Wareham	Constantine Yankopoulos* Nancy Haley	Community Dev. Dir. Job Developer	Government Local Planning

\* Elected Official

CITY/ TOWN	MEMBER	OCCUPATION/ AFFILIATION	REPRESENTATION
Westport	Sally Adams Edmund Medeiros*	Teacher	Education/ Local Planning

#### COMMISSIONERS AT-LARGE

Attleboro Area (1)	Minority/Low Income
Fall River Area (2) Tom Alecrim	Minority/Low Income
New Bedford Area (2) Jayme Dias	Minority/Low Income
Taunton Area (1) Jose Torres	

#### OFFICERS

Allan Campbell, Chairman; William Fitzgerald, Vice Chairman;  
Donald Hussey, Treasurer; Emeline MacDonald, Assistant Treasurer;  
George Bare, Past Chairman

\* Elected Official

TABLE 2  
ECONOMIC DEVELOPMENT COMMITTEE  
MEMBERSHIP LIST

1989

SRPEDD COMMISSION MEMBERS

---

Allan Campbell SRPEDD Chairman Dighton, MA	Emeline MacDonald SRPEDD Asst. Treasurer Raynham, MA
Patricia Redding Planning Board No. Attleborough, MA	Jayne Dias PACE, Inc. New Bedford, MA
Dr. Basil Castaldi Planning Board Dartmouth, MA	Dan DeCarlo Senior Planner Fall River, MA
Bill Fitzgerald SRPEDD Vice Chairman Community Dev. Dir. Taunton, MA	Alfred Lima City Planner New Bedford, MA
Constantine Yankopoulos Community Dev. Dir. Wareham, MA	Nicholas Tangney Town Planner Fairhaven, MA

PUBLIC AND PRIVATE SECTOR MEMBERS

---

Heather G. Bare Consultant Rochester, MA	Richard Shafer Taunton Industrial Development Commission Taunton, MA 02780
Maureen Wells Assist. Economic Dev. Dir. New Bedford, MA	Stephen Andrade Southeastern Massachusetts Partnership Dartmouth, MA
Frank Cahill Division of Employment Security Boston, MA	
Clyde Mitchell Small Business Development Center Fall River, MA	Steve Spinner MASSJOBS Southeast Fall River, MA

development  
efforts

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000



## A. EDA PROJECTS

From 1966 to 1988, the U.S. Economic Development Administration (EDA) invested \$24 million in the region. Table 3 outlines the projects funded.

### INDUSTRIAL PARKS

Over \$7 million of this investment was in five industrial parks throughout the region, including:

- Fall River Industrial Park
- New Bedford Industrial Park
- North Attleborough Industrial Park
- Taunton Myles Standish Industrial Park
- Wareham Industrial Park

These parks have provided space for existing industries and attracted new industries. They have brought new jobs to the region and have helped improve the economic climate by supporting spinoff businesses, leveraging private investment and supplementing local property taxes.

Many of these EDA funded industrial parks have been so successful they are at or near capacity. All 165 acres of the North Attleborough Park are developed. This development spanning 20 years provides space to 34 firms employing over 2,000 people.

In Fall River, a recent road extension has added 135 acres to their 210 acre park. The Fall River Park currently houses over 30 companies employing approximately 2,000 people.

In 1982 EDA funded the extension of Barnet Boulevard in the New Bedford Industrial Park. This \$2 million project has opened up 300 additional acres. In Taunton, nearly all of the 437 acres in the Myles Standish Industrial Park have been sold to high technology related companies including GTE.

When all of the proposed tenants move in, the park will have a total of 57 companies, occupying 2,500,000 square feet in 40 different facilities representing a private capital investment of over \$150 million. For Taunton, this means approximately 3,500 jobs and \$2.5 million in annual tax revenues.

The availability of reasonably priced industrial land, a skilled labor force, cooperative government officials, and a quality of life second to none have made the region attractive to industry.

#### TECHNICAL ASSISTANCE AND INFRASTRUCTURE IMPROVEMENTS

Continued technical assistance to communities and planning investments from EDA to agencies such as SRPEDD have also insured development of cohesive, coordinated strategies for the area and implementation of overall goals. This process--a minimal investment of over one million dollars in 23 years--has insured cost effective use of federal funds.

EDA has also invested a little over \$10 million to improve the infrastructure of the four cities and provide other necessary facilities. The impact of this investment can be observed in the many revitalization efforts being undertaken in the region's cities.

TABLE 3  
EDA GRANTS TO MUNICIPALITIES

1966-1988

DATE	COMMUNITY	PROJECT	GRANT
1966	Fall River	Port Development (T.A.)	\$ 50,000
"	"	Vocational Tech. H.S. (P.W.)	3,053,000
"	New Bedford	Terminal Bulkhead (P.W.)	2,902,000
"	Dartmouth	Extension of Water Distribution Syst. (P.W.)	27,000
1967	Fall River	Industrial Expansion (T.A.)	2,000
"	"	Ace Plastic (A.G.)	2,000
"	Plymouth	Waste Treatment Plant (P.W.)	1,056,000
"	"	Industrial Dev. Plan (T.A.)	25,000
1968	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	1,032,000
"	North Attleborough	Master Plan/Ind. Park (T.A.)	20,000
"	Plymouth	Water/Sewer/Road to Industrial Park (P.W.)	393,000
1969	New Bedford	Water/Sewer/Road to Industrial Park (P.W.)	517,000
1970	Fairhaven	Industrial Park Study (T.A.)	8,000
"	Fall River	Water/Sewer/Road to Industrial Park (P.W.)	200,000
1972	North Attleborough	Industrial Park (P.W.)	294,000
"	New Bedford	Urban Coalition/Red Crab Aquaculture Project (T.A.)	108,000
"	Plymouth	Sewer Pump Station (P.W.)	188,000
1973	Taunton	Industrial Park Study (T.A.)	15,000
1974	New Bedford	Water Main Const. (P.W.)	1,294,000
"	"	Urban Coalition/Red Crab Project (T.A.)	5,000
"	Somerset	Water Transmission Line (P.W.)	450,000
"	Taunton	Sewer Main/Ind. Park (P.W.)	858,000
"	"	Technical Assistance	38,000
1975	Taunton	Water Syst. & Rail Spur/Ind. Park (P.W.)	521,000
"	"	Site Clearance/Ind. Park (P.W.)	94,000
"	Fall River	Feasibility Study of Bulkhead Const. (T.A.).	89,000
"	New Bedford	Street and Sidewalk Imp. (P.W.)	347,000
"	Wareham	Tremont Dam Rest. (P.W.)	400,000
1977	New Bedford	Rehab/Piers 3 and 4 (P.W.)	314,000
"	Wareham	Industrial Park (P.W.)	419,000
1978	North Attleborough	Ind. Park Exp. (P.W.)	1,670,000
1979	Taunton	Roadway/Site Improvements to Industrial Park (P.W.)	1,687,000
"	New Bedford	Industrial Land Dev. (T.A.)	42,000
"	Wareham	Water Mains (P.W.)	615,000
1980	Fall River	State Pier	2,175,000
"	"	Planning (T.A.)	19,000
"	NEAMA	Import Compet. Assistance (T.A.)	169,000
1982	New Bedford/Dartmouth	Extension of Barnet Boulevard in the Industrial Park	592,015
1983	Fall River	Revolving Loan Fund	500,000
1984	SEED Corp.	Revolving Loan Fund	500,000
1986	SEED Corp.	Small Business Incubator	900,000
1987	Fall River	Revolving Loan Recapitalization	500,000
1987	New Bedford	Revolving Loan Fund	400,000
			<u>\$23,959,315</u>

SOURCE: U.S. Economic Development Administration, EDA Directory of Approved Projects.

P.W. - Public Works

T.A. - Technical Assistance



the  
district's  
economy





## A. INTRODUCTION

Although the state's unemployment rate is still below the nation's for the eleventh year in a row, Massachusetts' image has become somewhat tarnished.

Computer industries such as Wang, which were the pride of the state, have registered substantial losses, and the state currently has one of the lowest bond ratings in the nation, the result of a major budget shortfall and the inability to address the problem in a timely fashion.

Not yet included in last year's unemployment rate for the state are the 5,000 or so state employees who will be laid off this year.

The state is going through an adjustment period but the forces which have boosted the economy for the past decade are still in place--high technology, professional services and a "stable" population.

Southeastern Massachusetts is still experiencing growth although the real estate market has slowed considerably. Condominiums and single family units in subdivisions are taking longer to sell, but sale prices are remaining fairly stable.

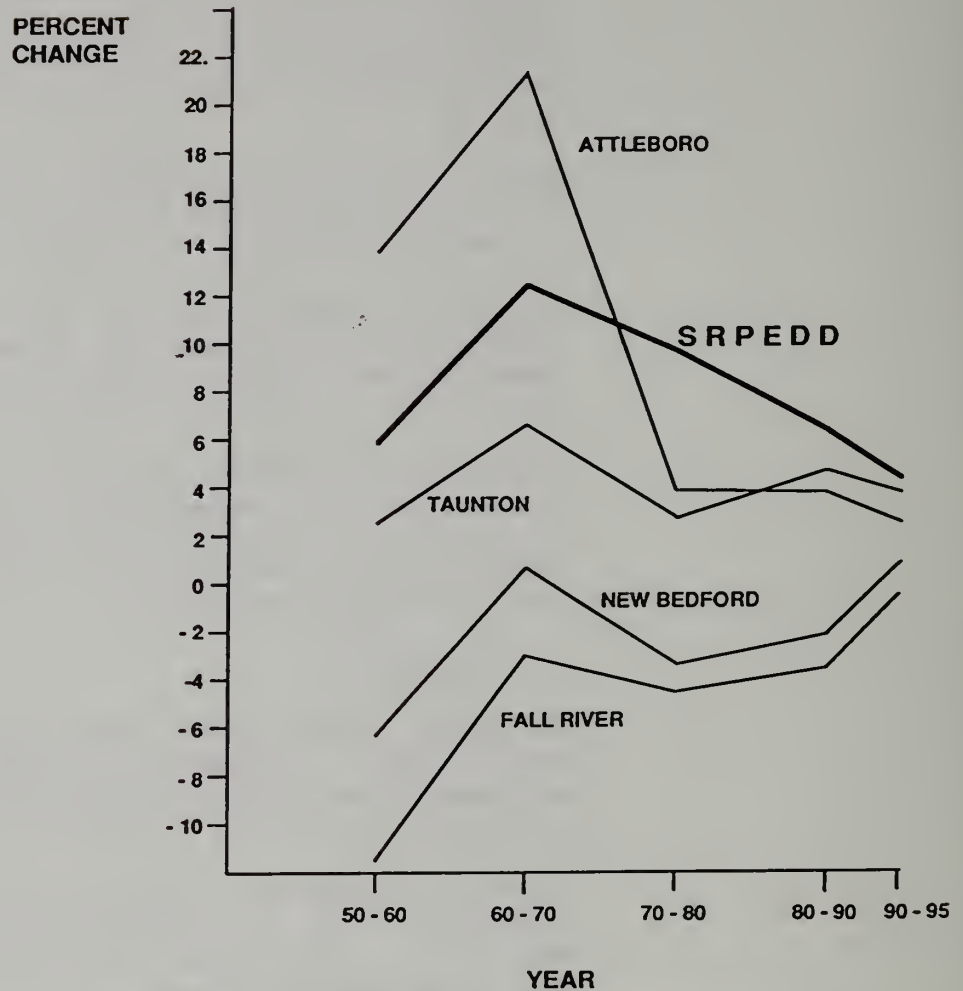
### 1. POPULATION

The region is the second fastest growing area in Massachusetts. Although economically depressed for many years, the region has experienced population growth and is expected to continue growing into 1995.

From 1950 to 1980 the region grew by 30 percent in comparison to the state's 22 percent. For the 15 year period from 1980 to 1995, the region is expected to grow by another 11 percent.

Even the region's largest communities, the cities of Attleboro, Fall River, New Bedford and Taunton, are projected to show some population increases. Over the past 30 years, the cities of Attleboro and Taunton have had static population growth and the cities of Fall River and New Bedford actually registered population losses. In the recent past, many of the region's smaller communities have become attractive as bedroom communities for large centers of employment such as Boston and Providence.

# REGIONAL POPULATION GROWTH PERCENTAGE INCREASE BY TEN YEAR INTERVALS



SOURCE: U. S. Census of Population and MISER Projections

RePopG-7/18/89

Although the region is experiencing population growth, the conditions of the overall population, especially those living in the cities have not improved substantially. In addition, population growth has put stress on public services. The region needs additional investment to address infrastructure improvements.

Education levels for Fall River and New Bedford are still well below the state's level. In Fall River, median school years completed increased from 8.8 in 1970 to 9.3 in 1980. In New Bedford median school years completed increased from 8.8 in 1970 to 9.5 in 1980. Although some improvement was registered over the 10 year period, these levels were well below the 12.6 median school years completed in 1980 in the state.

Likewise, poverty levels for the two cities are well above the state's average. In 1980, 14.8 percent of the persons living in Fall River and 16.2 percent of those living in New Bedford were below the poverty level. These figures were much higher than the state's 9.6 percent poverty level. Poverty levels for the City of Taunton and the towns of Middleborough and Wareham were also well above the state level.

## 2. EMPLOYMENT

For years the region has felt the impact of the exodus of the apparel and textile industries to the southern part of the nation. The cities of Fall River and New Bedford, which were once major centers of apparel and textiles, became depressed mill towns.

Until recently, the region has been removed from the growth occurring in the Boston area. As the cost of living increased in the Boston area, people moved to the region and commuted to Boston or the Providence areas for jobs.

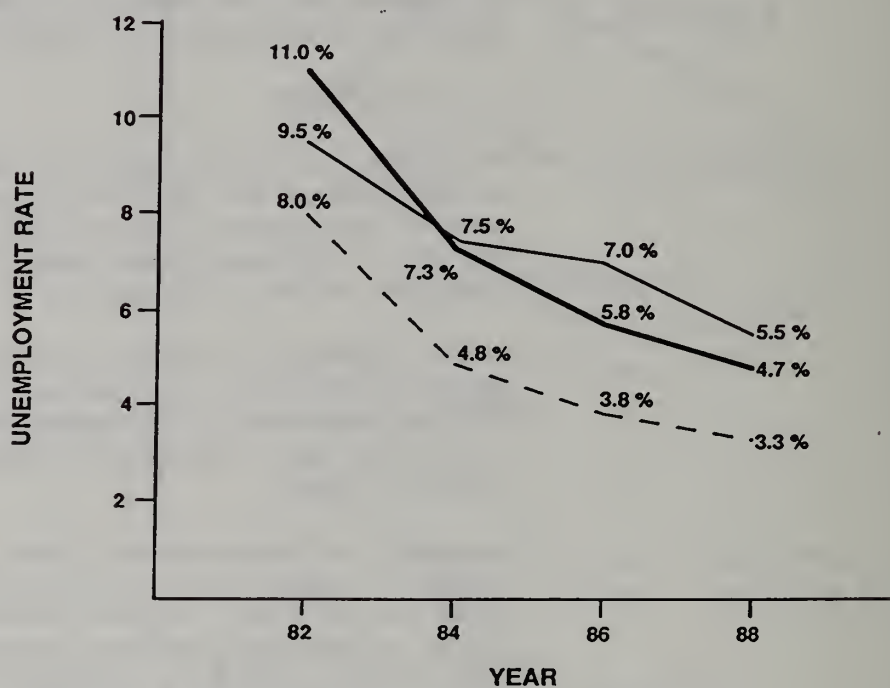
The 1980 U.S. Census shows that in almost half of the region's towns, 75 percent or more of the population works out of town. In the cities, close to 10 percent of the population commutes 30 minutes or more to work. Most of the towns have a higher percentage of commuters traveling 30 minutes or more. The fact, however, that as many as 18,000 people commute 30 minutes or more from Fall River and New Bedford for jobs elsewhere shows that these centers of population do not provide the jobs needed by their residents.

The region's unemployment situation has improved considerably since 1982 when double digit rates were quite common for most communities. By 1988, the region as a whole registered a 5.5 percent unemployment rate and the cities of Fall River and New Bedford had unemployment rates of 6.6 and 6.0 respectively. These rates were still higher than the state's and the nation's. Part of the reason was heavy reliance in mature and recession prone industries such as apparel and textiles. The City of New Bedford, which has one

of the largest fishing ports in the nation, also has been impacted by the fluctuation occurring in the fishing industry.

### COMPARATIVE UNEMPLOYMENT RATES

1982 - 1988



SRPEDD —————

MASS. - - - - -

U.S.A. —————

SOURCE: Massachusetts Division of Employment and Training

CoUnRa 82-88-1



TABLE 4  
EMPLOYMENT AND UNEMPLOYMENT  
ANNUAL ADJUSTED AVERAGES

COMMUNITY	LABOR FORCE		EMPLOYMENT		UNEMPLOYMENT RATE	
	1987	1988	1987	1988	1987	1988
Acushnet	5,071	5,146	4,863	4,937	4.1	4.1
Attleboro	18,063	17,951	17,211	17,073	4.7	4.9
Berkley	1,690	1,785	1,619	1,714	4.2	4.0
Carver	4,559	4,631	4,407	4,469	3.3	3.5
Dartmouth	13,575	13,774	13,019	13,218	4.1	4.0
Dighton	2,576	2,737	2,488	2,634	3.4	3.8
Fairhaven	7,853	7,940	7,498	7,612	4.5	4.1
Fall River	42,612	43,015	39,730	40,161	6.8	6.6
Freetown	4,166	4,214	4,006	4,068	3.8	3.5
Lakeville	3,567	3,619	3,502	3,551	1.8	1.9
Mansfield	8,242	8,148	8,044	8,009	2.4	1.7
Marion	1,982	2,063	1,919	1,986	3.2	3.7
Mattapoisett	3,114	3,218	3,029	3,132	2.7	2.7
Middleborough	8,133	8,224	7,805	7,916	4.0	3.7
New Bedford	46,755	47,426	43,894	44,565	6.1	6.0
North Attleborough	12,049	11,831	11,499	11,407	4.6	3.6
Norton	7,494	7,453	7,277	7,246	2.9	2.8
Plainville	3,186	3,268	2,972	3,022	6.7	7.5
Plympton	1,126	1,135	1,088	1,102	3.4	2.9
Raynham	5,098	5,096	4,966	4,945	2.6	3.0
Rehoboth	4,155	4,139	3,982	3,950	4.2	4.6
Rochester	1,930	2,002	1,893	1,957	1.9	2.2
Seekonk	6,328	6,355	6,169	6,118	2.5	3.7
Somerset	9,722	9,807	9,357	9,458	3.8	3.6
Swansea	8,079	8,191	7,808	7,891	3.4	3.7
Taunton	21,471	22,746	20,538	21,749	4.3	4.4
Wareham	9,914	10,392	9,480	9,889	4.4	4.8
Westport	6,970	6,985	6,639	6,711	4.7	3.9
District	269,480	273,291	256,702	260,490	4.7	4.7
Massachusetts					3.2	3.3
U.S.A.					6.2	5.5

SOURCE: Massachusetts Division of Employment and Training. "Job Market Research," 1989 (provided by Frank Cahill).

NOTE: These employment figures refer to individuals living in a community but not necessarily working there.

The manufacturing sector as a whole continued to lose employment while sectors like services, and retail and wholesale continued to grow. Industries like jewelry, apparel and textiles continued to lose jobs and there weren't enough new industries to replace those job losses. The net result, as discussed above, has been that many residents of the region continue to commute to larger metropolitan areas such as Boston and Providence for jobs.

With the completion of Interstate 495 in 1984, the situation has begun to change. Cities like Fall River and New Bedford, however, still have to address the decline of their major mature industries, and the replacement of lost jobs.

Employment information by industry is provided by the County Business Patterns published by the U.S. Bureau of the Census. Although the information is provided by county instead of municipality it provides a good picture of what is happening in the region.

The District covers all of the municipalities in Bristol County with the exception of Easton. All four of the District's cities, which provide most of the region's employment, are located in Bristol County. These cities are Attleboro, Fall River, New Bedford and Taunton. In addition, some of the larger industrial towns are also located in Bristol County--Mansfield, North Attleborough, Dartmouth.

In Plymouth County the District covers seven communities. The largest in terms of employment are Middleborough and Wareham.

As outlined in Table 5, total employment in Bristol County grew by 20.4 percent from 1977 to 1986. In terms of actual numbers, most of the growth occurred in services (52.1 percent), followed by retail trade (50.4 percent), contract construction (148.5 percent), finance insurance and real estate (45.3 percent), and wholesale trade (24.1 percent).

Manufacturing, which provided 49.6 percent of all employment in 1977 had declined 6.9 percent by 1986. In 1986 manufacturing provided 38.4 percent of all employment.

Service employment grew by 52.1 percent from 1977 to 1986. In 1977 service employment represented 15.7 percent of all employment. By 1986 it represented 19.9 percent of all employment. Some of the impressive services employment growth occurred in business and educational services. Health services which represent



# EMPLOYMENT BY INDUSTRY

INDUSTRY	BRISTOL COUNTY			PLYMOUTH COUNTY		
	77	86	% CHANGE	77	86	% CHANGE
TOTAL	145,953	175,659	20.4	74,768	121,321	62.3
• Agriculture, Forestry Fisheries (07-09)	1,457	1,327	(8.9)	336	728	116.7
• Mining (14)	66	86	(30.3)	66	145	119.7
• Contract Construction (15-17)	3,191	7,931	148.5	2,368	7,114	200.4
• Manufacturing (20-39)	72,452	67,426	(6.9)	19,286	21,771	12.8
• Transportation, Utilities (40-49)	7,266	6,622	(8.9)	5,132	5,871	14.4
• Wholesale Trade (50-51)	7,208	8,948	24.1	4,030	7,579	88.1
• Retail Trade (52-59)	26,076	39,213	50.4	24,633	39,229	59.3
• Finance, Insurance Real Estate (60-65)	5,191	7,543	45.3	3,560	7,255	102.9
• Services (70-89)	22,967	34,924	52.1	15,267	30,126	97.3
-Hotels (70)	735	798	8.6	472	628	33.1
-Personal (72)	1,996	2,233	11.9	999	1,514	51.6
-Business (73)	1,426	3,893	173.0	1,152	4,946	329.3
-Auto Repair (75)	634	1,172	84.9	603	1,039	72.3
-Amusement & Rec. (79)	755	1,329	76.0	706	1,221	72.9
-Health (80)	11,481	14,400	25.4	7,332	12,001	63.7
-Educational (82)	1,162	2,887	148.5	574	898	56.4
-Social (83)	1,837	2,729	48.6	1,118	3,109	178.1
-Membership Org. (86)	1,569	2,436	55.3	931	1,708	83.5
-Miscellaneous (89)	408	1,413	246.3	416	1,796	331.7

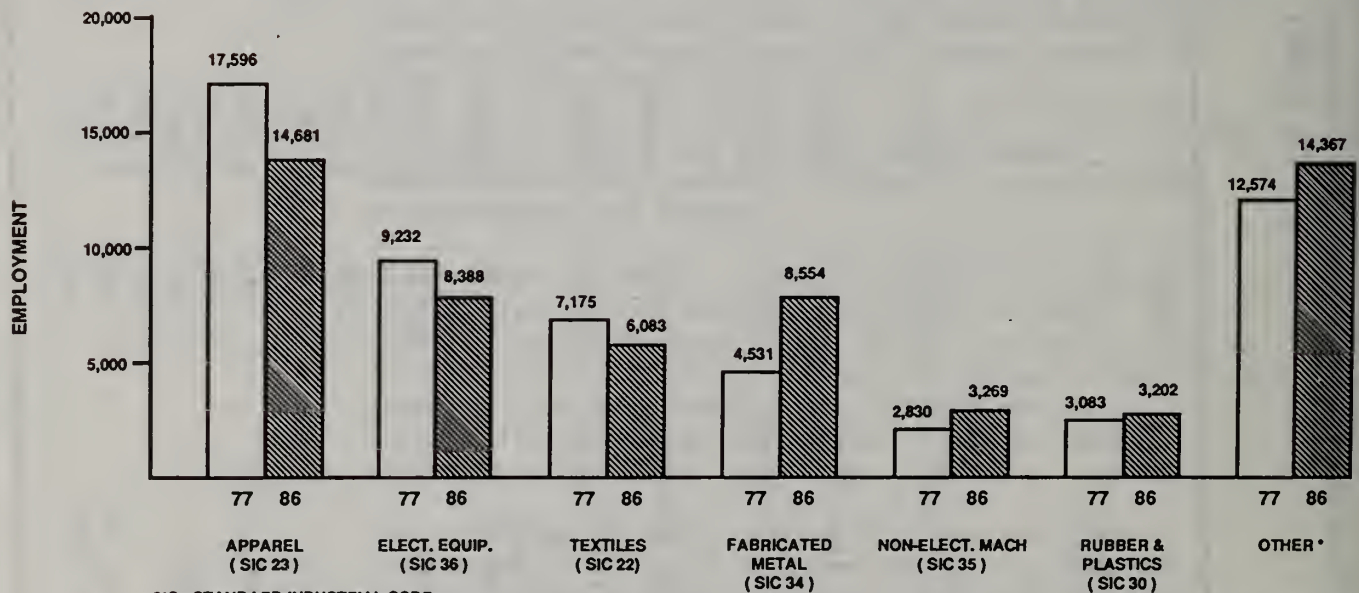
SOURCE: U.S. Bureau of the Census. County Business Patterns: Massachusetts, 1977 and 1986.

most of the employment in this sector continued to grow at a healthy pace.

In comparison to Bristol County, Plymouth County showed a much healthier economy with total employment growth of 62.3 percent from 1977 to 1986. In all major categories Plymouth County's employment growth surpassed that of Bristol County.

In Plymouth County, however, the majority of the employment was in retail trade followed by services and manufacturing. The fastest growing of the three sectors was services. In Bristol County the majority of the employment was in manufacturing following by retail trade and services. The fastest growing of these sectors was also services.

# MANUFACTURING EMPLOYMENT BRISTOL COUNTY 1977 AND 1986



SIC - STANDARD INDUSTRIAL CODE

\* OTHER - Includes: Food; Lumber & Wood; Furniture & Fixtures; Paper; Printing & Publishing; Chemicals; Leather; Stone, Clay and Glass; Primary Metal; Transportation Equipment; Instruments

SOURCE: U. S. Bureau of the Census, County Business Patterns: Massachusetts, 1977 and 1986

MaEmBC-77-86-1

In terms of manufacturing employment for Bristol County, most of the employment is in apparel followed by fabricated metal, miscellaneous manufacturing (mostly jewelry, silverware and plated ware), and textiles. Most of these industries registered employment losses from 1977 to 1986 with the exception of fabricated metal, which grew by 88.8 percent.

In addition to fabricated metal, some smaller industries such as non-electrical machinery, primary metal, rubber and plastics, printing and publishing and instruments also registered some growth.

### 3. INCOME

Income levels for the region increased from 1970 to 1980, but not enough to offset inflation. A more disturbing fact was that the percentage of persons below the poverty level actually increased in the cities of Attleboro, Fall River, New Bedford and Taunton.

The district average per capita income for 1985 was \$10,002. This figure was well below the state average of \$12,510 and slightly lower than the U.S. average of \$10,798. The cities of Fall River, New Bedford and Taunton were well below both averages with \$8,050, \$8,156 and \$9,742 respectively.

Average weekly hours and earnings for the two largest cities in the region were the lowest of all major cities in the state. In May, 1988, average weekly hours for Fall River and New Bedford were 36.9 and 38.2 respectively compared to 40.9 for the U.S. and 40.8 for Massachusetts. Average hourly earnings followed the same trend. Fall River registered \$7.63 and New Bedford \$8.76 compared to \$10.14 for the U.S. and \$10.12 for Massachusetts.

### 4. HOUSING

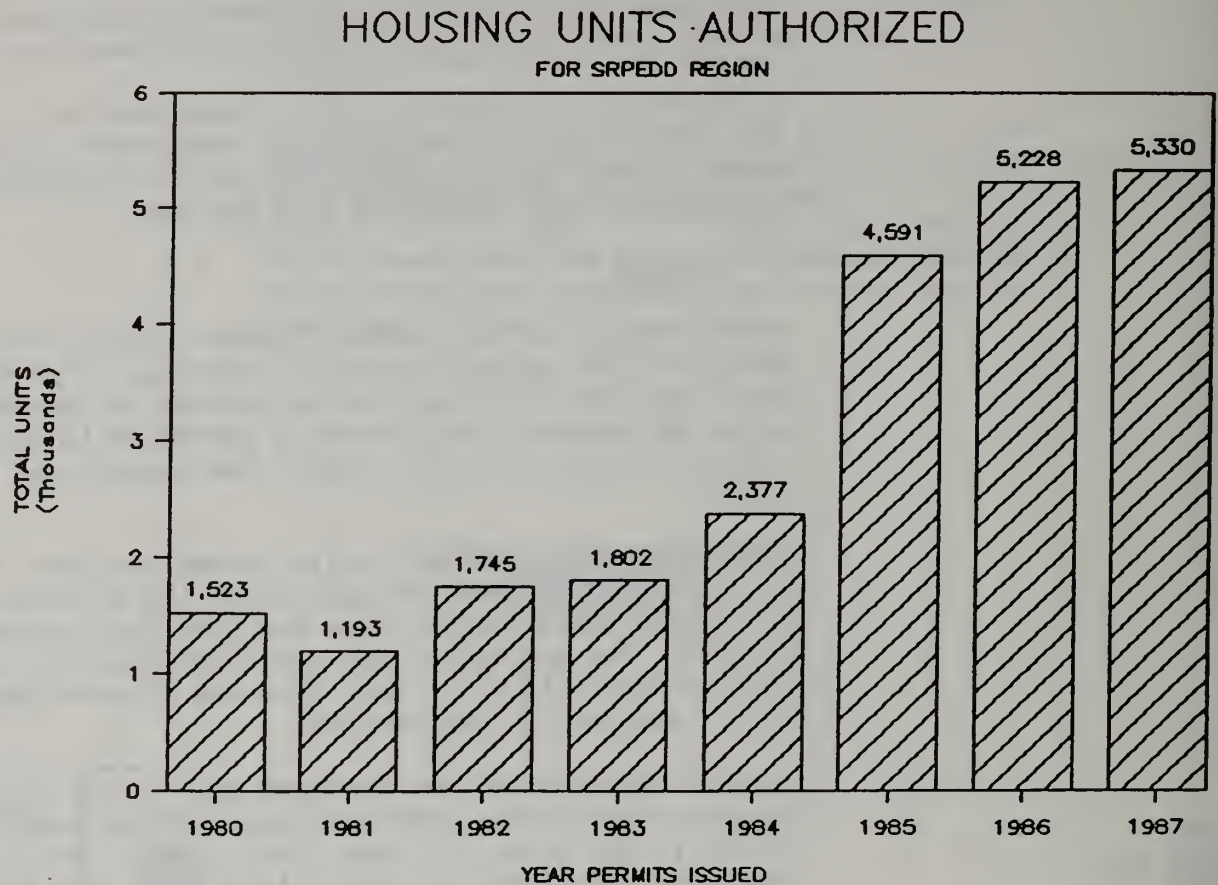
The growth registered in housing units has been dramatic, as measured by building permits during the period from 1980 to 1987.

The two year average for 1980-81 of 1,358 units per year was almost quadrupled by the 5,279 units per year average for 1986-87.

The impact of the housing boom was not spread equally throughout the region. The Town of Carver, for example, issued 1,186 permits in that eight year period, which represents a 52% increase over their housing stock from 1980. Mansfield's 1,625 permits



will increase the housing stock by 35%; North Attleborough's 1,724 permits represent a 23% increase.



The City of Taunton has approved 5,765 units of housing for development from 1980 to the present. These units are contained in 114 separate developments, ranging in size from 2 units to 370 units. If all these units are built, the city's housing stock will increase by 34%.

Probably the most discouraging factor in the housing area is affordability. The median value of all housing units in Taunton was \$35,900 in 1980; today, it is virtually impossible to find housing for less than \$100,000.

## 5. TRAFFIC

Traffic improvements have not kept pace with growth. The figures below, while mostly for limited access roads, are also indicative of traffic growth on local streets.

### SELECTED TRAFFIC COUNTS, 1980-1987

City/Town	Location	1980 Count	1987 Count	%Increase
Attleboro	I-95 at State Line	32,750	66,150	102%
Dartmouth/ New Bedford	Route 6	16,700	29,450	76%
Dartmouth/ New Bedford	I-195	29,500	45,850	55%
New Bedford	Route 140 Phillips Rd.	11,900	24,306 (88)	104%
Plainville/ Wrentham	I-495	13,850 (78)	35,200 (85)	154%
Raynham	Route 24 @ Route 44	20,422	29,343	44%
Swansea	I-195 @ Route 6	34,000	47,150	39%
Taunton	Route 140 @ Route 24	12,450	23,717	90%
	Route 24 @ Route 140	18,800	44,000	134%

These traffic impacts have occurred at a time when the ability of cities and towns to make improvements has been severely curtailed due to fiscal constraints. With the question of impact fees still unresolved, and the state's financial capacity diminished, needed improvements are not being made.

SRPEDD transportation planners believe that as many as nine highway interchanges will become so congested by the end of the century that traffic will be backed up onto highways during peak hours.

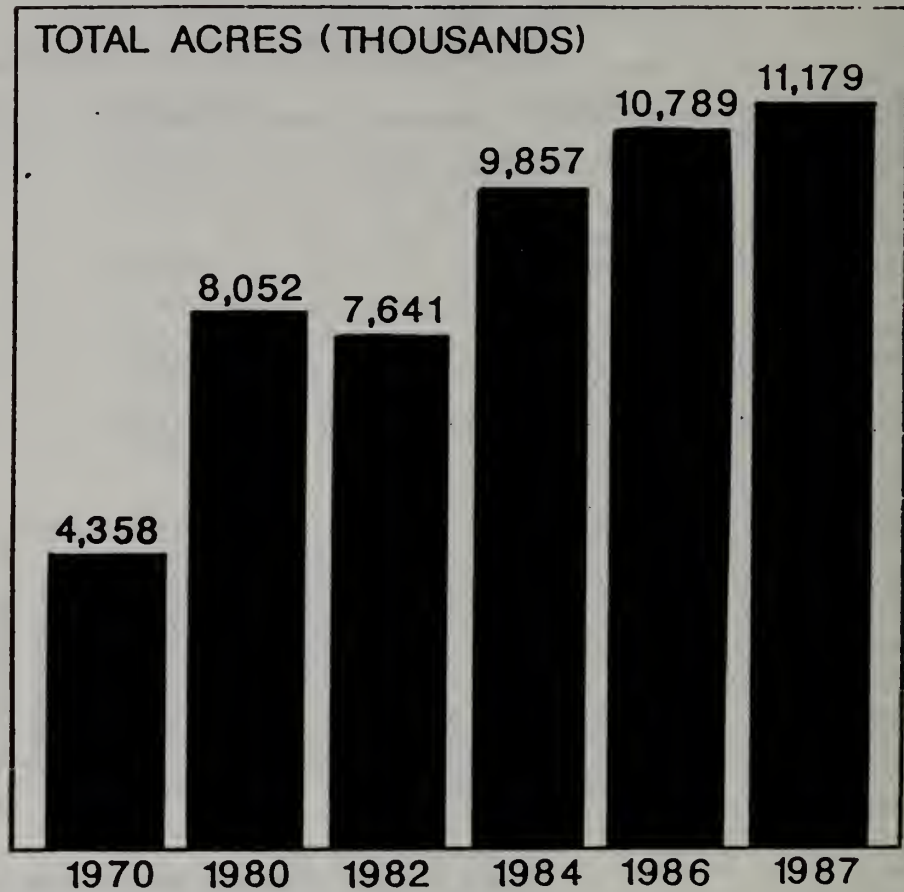
## 6. ENVIRONMENT

One measure of environmental quality which has both environmental and economic impact is shellfish bed closings.

In Buzzards Bay in 1987, there were 11,179 acres of shellfish beds closed due to bacterial contamination. This area is equivalent to 17.5 square miles. This

amount of closure represents an increase of 39% since 1980, and a 157% increase since 1970.

### Buzzards Bay\*



\*Wareham - Westport

The closure of these beds is due to a combination of pollution sources ranging from increased urban runoff, septic systems, pleasure boat discharges, and overloaded sewage treatment plants.

Overburdened landfills, increasing incidents of contaminated groundwater and rapid depletion of farmland are further indicators of growth impinging on environmental quality.



economic  
development  
centers



When Congress passed the Public Works and Economic Development Act of 1965, it envisioned economic development centers or growth centers as nuclei from which all economic activity would emanate. Growth centers became the anchors on which economic development districts would depend on to alleviate the economic distress of their redevelopment areas.

The District's growth centers, as designated by the U.S. Economic Development Administration, are the cities of Fall River, New Bedford and Taunton. These centers are characterized by population concentrations. They maintain a level of economic activity which generates jobs for people in nearby towns and they provide to a large extent the necessary social and economic services.

In 1988 the City of Fall River recovered considerably from the setback experienced in 1982 in terms of unemployment. The number of unemployed persons in the city increased from 8.6 percent in 1980 to 12.9 percent in 1982 and declined to 6.6 in 1988.

The City of New Bedford also showed improvement in its employment situation. The percentage of unemployed persons increased from 8.6 percent in 1980 to 14.3 percent in 1982 and declined to 6.0 in 1988. The City of Taunton experienced a jump in the unemployment rate from 7.9 percent in 1980 to 12.0 percent in 1982 and a decrease to 4.4 in 1988. The Taunton Myles Standish Industrial Park funded with EDA and state money has experienced tremendous growth over the past year. Located next to Interstate 495, the park is nearly full.

The cities of Fall River and New Bedford continued to depend on the apparel and related products and textile industries for the majority of the manufacturing jobs. For the three growth centers most of the employment growth has occurred in the service sector.

Although the population of southeastern Massachusetts is expected to grow at a higher rate than the rest of the state in coming years, the majority of the growth is expected to occur in smaller urban municipalities and rural communities which serve as "bedroom communities" for Boston and Providence.

The three cities still need to expand manufacturing sector opportunities. The cities of Fall River and New Bedford, especially, depend heavily on limited growth industries. The cities need to provide the kind of climate that will help revitalize these industries and help them expand. This effort should be coupled with

continued recruitment of high technology and other growth industries to broaden the industrial base.

In the recent past, the three cities have committed large amounts of federal and private funds to revitalize their central business districts and improve their infrastructures. These efforts will eventually result in substantial increases in wholesale/retail trade employment and in other sectors. Much of the economic situation experienced by the three cities in the past has been due to trends also taking place at the state and national level: cutbacks in many federal programs; the recessions of 1982 and 1975; double-digit inflation; a declining manufacturing sector; and costly energy supplies.

Economic activity, however, is not restricted to growth centers. The District has a number of older urban communities which have experienced substantial growth in the recent past. Of the four cities in the District, the City of Attleboro has the strongest economy. The city relies heavily on the metal products industry and boasts a large high technology firm, Texas Instruments, which employs approximately 5,000 people. In 1988 the city's unemployment rate was 4.9 percent. Attleboro provides almost twice as many jobs as the growth center of Taunton. The city is part of the Providence/Pawtucket Redevelopment Area and is oriented toward a larger nucleus, the City of Providence.

Another urban municipality providing substantial employment is North Attleborough. The North Attleborough Industrial Park, funded with EDA money, provides over 1,000 jobs. Mansfield has been growing substantially with the development of its Cabot, Cabot & Forbes Industrial Center. Middleborough also has much potential for growth with its new Commerce Park, Ocean Spray Headquarters, and strategic location next to I-495. Wareham is another community which has been experiencing growth and holds much potential for the future.

#### UNEMPLOYMENT RATES

1982 AND 1988

	<u>1982</u>	<u>1988</u>
Attleboro	8.8	4.9
Fall River	12.9	6.6
New Bedford	14.3	6.0
Taunton	12.0	4.4
<hr/>		
District	11.0	4.7
Massachusetts	8.0	3.3
U.S.A.	9.5	5.5

potential  
for  
economic  
development





A. OPPORTUNITIES  
IN THE 1990's

According to Richard Kateley, executive vice president of Real Estate Research Corporation and author of Emerging Trends, most of the dynamics which will influence development in the next five to ten years are already in place. He points out development of a regional mall, for example, which may take seven to ten years.

In an article in Urban Land, Kateley outlined new demand patterns for industrial space, office market, hotels, and retail. The following were his conclusions.

INDUSTRIAL SPACE - In sizeable cities research and development space is overbuilt. Over the long term the greatest opportunity lies in business parks which provide high levels of common tenant amenities. University related technology parks are expected to fade over the next five years. Obsolete facilities will need to be replaced in the 1990's, as more manufacturers try to stay competitive in world markets, but the spending will be for owner occupied facilities, not speculative space. Warehousing and distribution markets will still be attractive in areas with strong residential and retail growth.

OFFICE MARKET - Rapid and large scale growth in office employment peaked in 1975 and 1985. In the future, demand for office will be significantly reduced due to a number of trends.

HOTELS - The record year for hotel construction was 1986 with over 90,000 rooms added to the nation's inventory. Estimates for 1987 were 60,000 new rooms. A strong economy and increases in conventions and meetings have played a major role in hotel growth. Growth, however, is expected to have peaked and we will see a slow down in the future.

RETAIL - Slower population growth, fewer household formation, and the aging of the baby boom generation will mean demand for fewer, smaller scale, and more specialized retail projects. Despite slower population and household growth, however, the retail outlook remains bright since half of the working population will reach their peak earning years in the 1990's. There will be room for both new retail space and at-home catalog shopping.

B. DISTRICT  
POTENTIAL

The District has a number of characteristics which still offer great potential for economic development. To reiterate, some of these characteristics include:

- Land--still plentiful and less expensive than the Boston metropolitan area.
- Water--abundant in comparison with the rest of the state and nation.
- Transportation--network offering excellent accessibility to all areas of the District and major areas such as Boston, Providence and Cape Cod. The area also boasts two major seaports, one in the City of Fall River and another in the City of New Bedford.
- Labor Force--a versatile labor force.
- Infrastructure--established urban areas with land, building space and other amenities for industrial and commercial development.

One of the District's best characteristics is its labor force. As analyzed in the section on the economy, there are still unemployed members of the labor force in the District's cities. The region still offers growing businesses a source of labor not available in the Boston area and other parts of the state.

Another strength is the cooperative spirit of "can do" shown by the region's communities. One example of this attitude is the establishment of the Southeastern Massachusetts Partnership. Another example is the way economic development groups work together for the improvement of the region.

The high technology industry has begun migrating to the region to draw upon the available labor pool. An especially attractive area is the Route 495 "belt", the outer ring to Route 128 around Boston. But the high technology industry is not the single answer. The region needs to concentrate on small business creation, where most new jobs occur.

At the local level there are a number of EDA projects which offer great potential for industrial development and the overall diversification needed by the District. Some of these projects include: the Myles Standish Industrial Park in Taunton on the periphery of Interstate 495, the Airport Industrial Park in Fall River, the New Bedford Industrial Park, the North Attleborough Park, and the Wareham Industrial Park.

Since the late 1960's, EDA has provided grants which have prepared most of the industrial parks in the region. These parks have been very successful. EDA in effect has provided the seed money for industrial growth and jobs. Three of the region's parks are still looking to EDA for additional assistance to develop more space to attract growth industries. It is unlikely that the District's oldest cities will be able to finance these investments alone.

Small businesses which are responsible for most new job creation also need assistance to survive and grow. Support should include financial assistance along with other needed services such as those provided in an incubator.

The District will continue to assist in the development of all economic development-related projects offering good potential. Agriculture, fishing and tourism also offer great potential for the District. Cranberry farming, scalloping and tourism in general have been growing in the area and are expected to continue growing. Ongoing historical preservation and other urban revitalization efforts should have a direct beneficial impact on tourism.

A new area of potential is the creation of jobs by "growing" small businesses already located in the region. The District has many small businesses which could become the giants of tomorrow in the high technology field and other growth areas. By creating the South Eastern Economic Development (SEED) Corporation and staffing its operations, the District has provided a financing mechanism to assist these businesses to grow.

## C. CONSTRAINTS

Some of the District's worst constraints are somewhat beyond local or regional control but follow state and national trends. They include the higher cost of doing business in this part of the nation; generally higher tax rates and insurance premiums; costly and less available energy supplies; and high shipping costs due to distance from growing market areas.

More specific District constraints include:

- Manufacturing--a declining manufacturing sector.
- Mature Industries--a need to revitalize "mature" or declining industries such as apparel and related products, textiles and jewelry.

A constraint which affects all Massachusetts communities is "Proposition 2 1/2". The lack of additional town revenues generated by new development of property is seen as a strong anti-growth effect of the statute. The proposition limits the tax levy to a 2.5 percent increase from each previous year. An increase in the tax base produced by a new development is absorbed into the general levy and the tax rate. The result is that a town has to share existing services with the new development, because no substantial additional revenues can be generated for the community.



strategy  
and  
implementation





A. PROGRAM AND  
PROJECT SELECTION

The existing economic development goal and objectives for the District were adopted October 26, 1983 by the SRPEDD Commission. They provide guidance for the District's work program and project selection process. They are:

GOAL

ECONOMY: Strengthen and diversify the region's economic base through the expansion of existing businesses and the attraction of new growth businesses which will create needed and better paying jobs; assist in preparing the region for its "re-industrialization" in terms of manpower training, financing incentives, governmental coordination and infrastructure development.

OBJECTIVES

1. Encourage the expansion of existing industries and the establishment of new industries by providing financing assistance (SEED, UDAG's, etc.), other support services and serving as an information resource for the region.
2. Provide technical assistance to local development, industrial development, community development corporations, chambers of commerce, and other local and regional economic development agencies.
3. Provide assistance to the private sector, especially in the areas of information and investment financing through SEED Corporation.
4. Make known the locational benefits of the region, such as the relatively plentiful and qualified labor, land and water, the coastal location, quality of life, and the good transportation network.
5. Provide for coordination of manpower training programs and needs of industry.

In August 1988, the Economic Development Committee also adopted a set of criteria for ranking projects submitted by municipalities and non-profit groups in the District. Table 6 outlines the criteria.

B. PROGRAM CONSIDERATIONS  
AND COURSE OF ACTION

Table 7 outlines the District's proposed program. It is a listing of projects which are of high priority for the region in its economic development strategy. Table 8 lists all projects in priority order as recommended by the Economic Development Committee and adopted by the District Commission in September 1989.

TABLE 6

## PROJECT RANKING CRITERIA

	Pts.									
1. Unemployment Rate	0					5				10
	:	.	:	.	:	.	:	.	:	.
	:					:				:
	At or below U.S. Average (5.5%)					1.5 times U.S. Average (8.3%)				
2. Per Capita Income	0					5				10
	:	.	:	.	:	.	:	.	:	.
	:					:				:
	At or below U.S. Average (\$10,798)					80% or less U.S. Average (\$8,638)				
3. Permanent Job Creation	0					5				
	:	.	:	.	:	.				
	:					:				
	0					500+				
4. Construction Jobs Created	0					5				
	:	.	:	.	:	.				
	:					:				
	0					100+				
5. Spinoff Jobs Creation	0					5				
	:	.	:	.	:	.				
	:					:				
	0					400+				
6. EDA Investment/Perm. Job	0					5				
	:	.	:	.	:	.				
	:					:				
	\$5,000/Job					Less than \$1,000/Job				
7. Private Investment Leveraged	0					5				
	:	.	:	.	:	.				
	:					:				
	None					500% of EDA Invst.				

TABLE 6  
CONTINUED

DISCRETIONARY CRITERIA (0-2)

1. GROWTH CENTER
2. INNOVATIVE PROJECT
3. STRENGTHENS MANUFACTURING
4. ASSISTS SMALL BUSINESS
5. REGIONAL IMPACT
6. OTHER

TABLE 7

## PRIORITY PROJECTS

1989-1990

LOCAL PRIORITY	PROPOSED PROJECTS DESCRIPTION AND LOCATION	RELATED GOALS*	FUNDING (IN THOUSANDS)		INITIATION COMPLETION DATE	AGENCIES RESP.	ENVIR. IMPACT (IF ANY)	NO. OF JOBS CREATED
			SOURCES AND AMOUNTS	ESTIMATED TOTAL COST				
			NO. PRIORITY/FEDERAL/STATE/LOCAL/OTHER					
1	Industrial Park Expansion, New Bedford	1	1	EDA \$720	\$480	\$1,200	Sept. '90- June '91 Indust. Foundation/ City	1,000+
2	Myles Standish Industrial Expansion, Taunton	1	2	EDA \$1,000	\$5,625	\$6,625	Sept. '90- June '91 TDC	4,900
3	Wareham Industrial Sewer Cranberry Highway	1	2	EDA \$269	\$330	\$599	Sept. '90- June '91 Wareham EDIC	2,050
4	Westport Route 6 Watermain	1	2	EDA	\$200	\$400+	Sept. '90- June '91 Board of Selectmen	

EDA = Economic Development Administration

TDC = Taunton Development Corporation

EDIC = Economic Development and Industrial Corporation

TABLE 8  
RANKING OF HIGH PRIORITY PROJECTS  
1989-1990

<u>PROJECTS RANKED</u>	<u>AVERAGE POINTS</u>
1. New Bedford Industrial Park Expansion	47
2. Taunton Myles Standish Industrial Park	41.4
3. Wareham - Industrial Park, Sewer, Cranberry Highway	36
4. Westport - Route 6 Watermain	16.4



C. PLAN FOR  
IMPLEMENTATION

1. DISTRICT STRATEGY

a. Rationale

The overall purpose of the Public Works and Economic Development Act of 1965, as amended, is...

To provide for public works and development facilities, other financial assistance and the planning and coordination needed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.

The District program is funded under this legislation. Since its establishment in 1969, the District has developed projects and conducted other economic activities with EDA assistance in the struggle to improve the economic viability of the region. The focus of these activities has been twofold: planning efforts to facilitate public and private investment in the region and project specific development primarily in the region's ports and industrial parks.

Although the national recessions of 1974-1975 and 1982-1983 severely impacted the region's manufacturing base and hindered many of the District efforts, 1988 was a boom year. The unemployment rate continued to decline and the region experienced major development.

Southeastern Massachusetts, however, still trails behind other parts of the state and New England. This is partially due to the slower movement of high technology industries into the region.

In the Fall River and New Bedford areas, there is a high reliance on the apparel and textile industries. Historically these industries have not done well in recessionary times. Apparel and textiles have been and continue to be negatively impacted by foreign imports.

In the Attleboro area the jewelry industry faces the same plight as the apparel and textile industries. The area, however, has a more diversified industrial base than the Fall River or New Bedford areas.

The region, however, is beginning to diversify its industrial base. The area is reinvesting in rapid growth industries and export-oriented services.

With the Route 128 "belt" becoming saturated from labor competition, the Route 495 "belt" in the region



is perceived as increasingly attractive. The future of communities in the Route 495 "belt" looks bright in terms of industrial development and office market potential. Industrial parks in Mansfield, North Attleborough and Taunton have experienced an inflow of high technology firms. Future growth is expected in industrial areas in Attleboro, Fall River, New Bedford and Wareham as well.

It is important, however, that the region maintain existing industries like apparel, textiles and jewelry, which represent almost half of all manufacturing jobs. The region must also make a concerted effort to help small business start-ups to survive and grow.

To put it simply, the District's major goal is to create jobs and revitalize the region's economy. Its strategy as alluded to in the preceding discussion is to pursue a double-pronged approach:

- Provide opportunities and create a favorable climate for existing businesses to expand, and
- Attract new growth industries which will help diversify the economic base of the region.

The strategy is based on the reality of economic development -- that the majority of business expansions come from existing businesses. The District, therefore, needs to revitalize its more mature industries -- apparel, textiles and jewelry, and help its small growth industries to expand.

On the other hand, the District also needs to diversify its economic base since its older industries are extremely susceptible to recessionary trends. So far the District has not benefitted substantially by the growth of high technology industries and other growing industries located close by in Massachusetts.

b. Project Implementation

The District's strategy is being implemented through the development of high priority projects listed in the OEDP. In the cities of Fall River and New Bedford, the District has worked to provide prepared industrial space for existing industries to expand and for new industries coming into the region.

The District will continue to develop projects which meet its strategy. As projects are approved and funded by EDA, the District will continue to work with those involved to ensure timely completion and accomplishment of stated objectives. The District will provide the technical assistance needed to maximize the economic benefits gained by EDA investments.

A new focus for the District since 1982 has been small business financing and technical assistance. This effort continued to expand in 1988. Small business financing provided by SEED Corporation's "504 Program" and a SEED revolving loan fund capitalized with \$500,000 from EDA and another \$500,000 from the state continued in 1988.

## 2. TASKS AND PROPOSED ACTIVITIES

### a. Coordination/Outreach

The focus of all project development and coordination/outreach activities conducted by the District is the development of projects which will benefit the economic climate of the region and implement the District's strategy. This task will account for 70 percent of the total work effort.

1) OEDP Priority Projects--The District will continue to work on those projects listed in the OEDP to ensure that the proper steps are taken and that the coordination necessary for implementation is conducted.

2) Technical Assistance--An ongoing function of the District is to provide technical assistance to communities. Under special contracts the District has provided assistance to the cities of Fall River and New Bedford.

3) South Eastern Economic Development (SEED) Corporation--The District will continue to staff SEED Corporation. In the coming year staff hopes to package 5 applications for small business financing under SBA's "504 Program". Staff will also continue to provide financing to small businesses under EDA's Revolving Loan Fund Program. These applications should provide an average of 200 new jobs in the region.

In addition, the District staff will organize meetings of the Board of Directors and the Loan Review Committee.

4) Ongoing Activities--Ongoing coordination activities will include meetings with and/or membership in the following groups: industrial development commissions; chambers of commerce; economic development staffs in New Bedford, Fall River, Attleboro, Taunton, Middleborough and Wareham; private industry councils; Bristol County Development Council; Plymouth County Development Council; College of Business and Industry, Southeastern Massachusetts University; Center for Economic Development, University of Massachusetts; Massachusetts Economic Development Council; the Small Business Development Center and the Southeastern Massachusetts Partnership. Ongoing coordination with the Economic Development Representative for EDA, the U.S. Small Business Administration and with state agencies involved in economic development activities will also continue.

5) Workshops--Co-sponsor with the chambers and other economic development agencies in southeastern Massachusetts workshops as necessary. The purpose of the workshops will be to inform local officials and others involved in economic development about new programs and timely issues.

Whenever possible, the District will get involved in more general coordination/outreach activities which will lead to project development. The District staff will attend workshops and conferences aimed at industrial development commissions, chambers of commerce, local officials and others involved in economic development. The District will set up displays and provide handouts in order to familiarize workshop and conference attendees with the District's economic development activities and EDA programs.

b. Reports

The District will prepare those reports required by EDA as part of the planning grant agreement and also conduct studies, as noted below. This task will account for 20 percent of the total work effort.

1) Overall Economic Development Program--Prepare the annual progress report of the OEDP to maintain EDA eligibility as a District. As part of the OEDP, maintain a current analysis of economic trends and developments, and prepare a strategy to meet economic needs and concerns. The strategy consists of two aspects: a staff work program focusing on activities which will meet identified needs, and development of projects to improve the economic needs identified in the OEDP. Involve as many parties affected by the OEDP



as possible in the process of developing the progress report.

2) Semi-Annual Reports--Prepare two semi-annual reports to keep EDA abreast of ongoing activities and progress.

3) Fact Book--Update annual data in the fact book and revise industrial and commercial survey data according to new development. Preparation of the original fact book was funded under the fiscal year 1980 grant. The purpose of the fact book is to provide developers with an overview of the region and its assets for economic development. The fact book, in effect, enables developers to focus on specific communities which meet their needs. It provides detailed economic development information which is currently unavailable through other sources.

4) Newsletter--Continue to prepare an economic development section to the District newsletter. The purpose of the section is to keep industrial development commissions, chambers of commerce, local officials and others involved in economic development informed about the District's EDA program and current economic development activities.

5) Annual Reports--Prepare an annual report for the District to inform member cities and towns of District activities for the previous year.

6) Fact Sheets--Develop fact sheets and brochures on various issues and new programs as necessary to inform local communities.

#### c. Administration

Under administration fall such general activities as developing monthly work programs; maintenance of files; meetings of economic development staff and other District staff for coordination purposes. Major administration activities will account for 10 percent of the total work effort. They include:

1) Economic Development Committee--Continue to broaden present base as economic development needs and interests dictate; organize preparation of agenda, minutes, handouts and presentations.

2) Commission--Keep District Commission (official OEDP Committee) aware of recent happenings in economic development; report on Economic Development Committee actions and recommendations; review applications for economic development projects originating with the

region (formerly under Office of Management and Budget Circular A-95); review industrial revenue bond applications under the Massachusetts Industrial Finance Agency program.

3) Requests for Information--Provide information on economic trends in the region and other statistical data as requested by developers, municipalities, community groups and individuals.





# **appendices**

II OF BLACK

SRPE  
Dartm  
Attleb



# SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT

88 BROADWAY • TAUNTON, MASS. • 02780 • (508) 824-1367  
M E M O R A N D U M

TO: Mayors, Boards of Selectmen, SRPEDD Commissioners, and Economic Development Committee

FROM: Stephen C. Smith, Executive Director  
Maria G. Gooch, Economic Development Director

DATE: May 30, 1989

SUBJECT: PROJECTS ELIGIBLE FOR EDA FUNDING

Once again we are beginning the process of updating the Overall Economic Development Program (OEDP) for southeastern Massachusetts. The OEDP makes communities eligible for Economic Development Administration (EDA) funding of economic development projects.

Given EDA's proposed budget for next year, the agency may fund one public works project in this region. If you have a project which meets the criteria outlined below, please let us know. EDA funding may cover up to 60 percent of a total project, depending on the labor market. In order for your project to be eligible for EDA funding, it must be listed in the OEDP.

We have enclosed a copy of the list of projects included in last year's OEDP. We will be updating this list, so please let us know if there have been any changes in your project(s) or if you would like to submit a new project. A project should meet the following criteria:

- provides public infrastructure (water, sewer, roads, lighting, etc.) for industrial development;
- includes private commitment of dollars in terms of industrial expansion;
- creates new jobs;
- would be ready for implementation in a year or so;
- has matching funds available if the grant is obtained; and
- involves no relocation of an industry from another labor market area.

We also develop a list of potential future projects and encourage you to submit any projects in the idea stage, although they will not be ranked this year. SRPEDD's Economic Development Committee will be meeting to review projects. PLEASE RETURN PRELIMINARY INFORMATION ON YOUR PROJECT BY JUNE 5 ON THE QUESTIONNAIRE FORM PROVIDED.

Thank you for your cooperation.

SCS:NGG:amd

Enclosures: OEDP Table 14  
Questionnaire

(M-89-07)

SRPEDD is governed by a Commission comprised of representatives from member communities: Acushnet, Attleboro, Berkley, Carver, Dartmouth, Dighton, Fairhaven, Fall River, Freetown, Lakeville, Mansfield, Marion, Mattapoisett, Middleborough, New Bedford, Norton, Attleborough, Norton, Plainville, Plympton, Raynham, Rehoboth, Rochester, Seekonk, Somerset, Swansea, Taunton, Wareham, Westport.

SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT  
88 BROADWAY TAUNTON, MA 02780

OEDP Project Listing  
Preliminary Questionnaire

COMMUNITY: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_  
(Name, Address, Phone)

AGENCY RESPONSIBLE: \_\_\_\_\_

BRIEF PROJECT DESCRIPTION: \_\_\_\_\_

TOTAL PROJECT COST: \_\_\_\_\_

SOURCE OF MATCH (40-50 PERCENT) \_\_\_\_\_

PRIVATE INVESTMENT TO BE LEVERAGED: \_\_\_\_\_

DIRECT JOBS TO BE CREATED: \_\_\_\_\_

STATUS OF PROJECT (CHECK AS APPROPRIATE):

IDEA STAGE \_\_\_\_\_

READY TO GO \_\_\_\_\_

PRELIMINARY ENGINEERING \_\_\_\_\_

COMMENTS: \_\_\_\_\_

PLEASE ATTACH ANY ADDITIONAL INFORMATION YOU MAY HAVE ABOUT THE PROJECT.

SOUTHEASTERN REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT

ECONOMIC DEVELOPMENT PROJECTS

REGIONAL PROJECT RANKING FORM

DATE \_\_\_\_\_ PREPARED BY \_\_\_\_\_

TITLE OF PROJECT \_\_\_\_\_

A. BACKGROUND INFORMATION

• Potential Applicant:

Name \_\_\_\_\_

Street \_\_\_\_\_

City/Town \_\_\_\_\_

• Project Location:

Street \_\_\_\_\_

City/Town \_\_\_\_\_

County \_\_\_\_\_

• Applicant Type:

State \_\_\_\_\_ County \_\_\_\_\_

City/Town \_\_\_\_\_

Non-Profit Organization \_\_\_\_\_

Other (specify) \_\_\_\_\_

• Approximate Project Cost:

EDA \_\_\_\_\_

Other Federal (specify) \_\_\_\_\_

State \_\_\_\_\_

Other (specify) \_\_\_\_\_

Total \_\_\_\_\_

- HAS PROJECT BEEN SUBMITTED FOR FOR RANKING BEFORE? \_\_\_\_\_ IF SO, INDICATE FIRST YEAR SUBMITTED \_\_\_\_\_

- IF YOU'RE SUBMITTING MORE THAN ONE PROJECT, INDICATE LOCAL PRIORITY FOR THIS PROJECT \_\_\_\_\_

• Project Narrative:

Describe the project briefly (include objectives and expected beneficiaries. If project is for industrial space, indicate vacant acres available.) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



B. PROJECT RANKING CRITERIA

1. What is the city's/town's unemployment rate for last year?

---

2. What is the city's/town's most recent per capita income?

---

3. How many permanent jobs will this project create? Explain estimate:

---

---

4. How many construction jobs will the project create? Explain estimate:

---

---

5. How many spinoff jobs will the project create? Explain estimate:

---

---

6. What is the EDA cost per permanent job created (divide EDA portion of project by jobs created)?

---

7. How much private investment will the project generate?

---

---

C. DISCRETIONARY FACTORS

1. Is the project located in an EDA designated growth center (Fall River, Taunton, New Bedford)?

---

2. Is this an innovative project? Explain: \_\_\_\_\_

---

---

3. Does this project strengthen the manufacturing base? Explain:

---

---



4. Does this project assist small businesses? Explain: \_\_\_\_\_

---

---

---

5. Does this project have regional impact? Explain: \_\_\_\_\_

---

---

---

6. Does this project incorporate any other factors not already discussed?  
Explain:

---

---

---

---

---

# Mayor's 'lean' budget cuts 95 jobs

By Thomas Duffy  
Standard-Times staff writer

**NEW BEDFORD** — Mayor John K. Bullard said Monday that he will propose a "lean" \$118.5 million budget to the City Council that would slash 95 city jobs and eliminate virtually all capital spending.

The budget would amount to about a 5 percent cut in the current budget, which, with supplemental appropriations, is expected to swell to about \$123.8 million by the end of the fiscal year in June, according to budget director John Musante.

"We tried as best we could to eliminate layoffs and focus our priorities on education and public safety," the mayor said this morning.

Mayor Bullard gave a behind-the-curtain peak at the city budget Monday night as the School Committee adopted a \$47.26 million budget for 1989-90. The school budget represents about a \$1.51 million increase over the current budget.

Along with the Police and Fire departments, the school budget is one of the few areas where the mayor will propose increases, the mayor said. Without giving specific figures, he said the police budget, \$9.2 million, and the fire budget will rise "slightly because they are practically all salary."

"Otherwise, it will be \$5 million in cuts," he said.

The mayor will present the budget to the City Council at 6:30 p.m. Wednesday. After

## An early look at the mayor's budget

### School budget

Current: \$45.75 million  
Proposed: \$47.26 million

120 teachers have been given layoff notices, but could be hired back, depending on the availability of state and federal funds.



Mayor Bullard

### City budget

Current: \$123.8 million  
Proposed: \$118.5 million

Eliminates 95 positions, including 20 school crossing guards, achieved mostly through attrition.

NBS

5/9

Staff chart by George Padest

■ **THE SCHOOL COMMITTEE** approves the proposed \$47.26 million school budget / Page B1

a series of budget hearings, cuts will be made and the budget is expected to be approved by June 20.

Most of the 95 jobs will be eliminated by not filling vacancies. Hardest hit will be the Police Department's school-crossing guards, where 20 positions will go unfilled.

The city budget for fiscal 1990 is based on the House version of the budget, which would slash New Bedford's share of local aid from \$74.9 million to \$69.9 million.

"As lean as this budget is, it can't be regarded as a worst-case scenario," the mayor said. "One thing the Senate has been saying is that the House budget is still out of whack. One cannot guess what the Senate will do with the budget."

The City Council wanted \$14.4 million from the mayor's request last year, and approved a \$108.2 million budget. However, total spending stands at about \$120 million because of additional spending during the year, Mr. Musante said.

He said the mayor is expected to request another \$3 million in capital spending before the end of the fiscal year for renovation.

(See BUDGET, Page A7)

## Budget

(Continued from Page 1)

tions at the city-owned Hillman Street annex and court-ordered improvements at the primary sewage treatment plant, among other things.

Next year, some capital projects will be paid for through long-term loans. For example, the mayor said, a multimillion-dollar request from the Department of Public Works to pay for the closing and capping of the landfill will be paid for with city-issued bonds.

The mayor said he hopes the city will have to put the brakes on capital spending for only one year.

"I think we can afford a one-year elimination," he said. "That is based on the message we think we are getting from the state, which is that we've got to tighten our belts for a year."



# Morse Tool to lay off third of workers

UBS 4/21/89

## Reduction planned for five weeks; president replaced

By Rob Crowley  
Standard-Times business writer

**NEW BEDFORD** — Struggling Morse Tool Inc. will lay off more than a third of its workforce — eliminating one of its two shifts — for five weeks beginning in May, the company said Thursday.

Menville, former company president H.A. "Bud" Gardner, who retired after just 10 years on the job, has been replaced by a top executive from the parent company in Scotland.

The layoffs and changes, including an

overhaul of the company's manufacturing operation, are part of an effort to regain a solid footing in the cutting tool market, said Albert J. Roy, the company's director of human resources.

Morse, the oldest drill bit manufacturer in the United States, has slogged through a series of financial troubles in recent years, including a bankruptcy court filing and the company's near demise in 1987.

The workforce at the plant straddling Pleasant Street in the city's South End, once 1,000 strong, has dwindled to 170 million work-

■ **ITS BIG, AGING BUILDING** hobbies Morse Tool's efforts toward efficiency / Page A6

ers and about 40 management and clerical employees.

"The specific numbers (of layoffs) we really won't have until early next week," Mr. Roy said. But the temporary layoffs will encompass "in excess of one-third of the workforce" and include both union and non-union employees, he said.

"It will be heavy," Dennis Brady, president of Local 377 of the United Electrical Radio and Machine Workers Union, said of the layoffs. "The business is a little slow right now and the company wants to regroup a little bit."

Mr. Roy said the temporary layoffs could extend longer than the planned five weeks. Morse will reduce its "significant" inventory during that time, he said.

Morse's last layoff occurred in September 1988 and affected about 30 workers. Most of them had been recalled, said Mr. Roy.

Morse is owned by International Twist Drill Holdings Ltd., a holding company for ITD, a Scottish manufacturer of precision

twist drills. John Lindsay, a co-owner of ITD and chairman of the board of ITD Holdings, is now in charge of the New Bedford plant, Mr. Roy said.

Mr. Gardner, who was named president of Morse in July 1987, retired voluntarily in January of this year, Mr. Roy said. A source said Mr. Gardner took vacation in the fall of 1988 and never returned to the job.

Also, Vice President Raymond Zeman left his post in early April and now serves as a consulting engineer at Morse, said Mr. Roy. Neither Mr. Gardner nor Mr. Zeman could be reached for comment.

# Textile mill to shut, can't find workers

NBIS 5/18

## Nylon, rayon in short supply; 50 lose jobs

By Rob Crowley  
Standard-Times business writer

NEW BEDFORD — Fairhaven Textile Corp., one of the city's two remaining weaving mills, will close June 30, putting about 50 people out of work.

Though business was strong, the North End mill could not find enough workers to run its looms and had difficulty obtaining raw materials, the company's vice president said.

"We were, up until eight or nine weeks ago, working seven days a week," said Bryan L. Boullis, vice president and general manager. "But because of the yarn problem and only being able to run half our operation, we just couldn't make it profitable."

Mr. Boullis said one weave room at the 79 Brook St. plant has not been operating for 1½ years because the company has been unable to hire workers. He said when the giant Berkshire-Hathaway textile mill closed in 1985, most of the skilled weavers, loomfixers and other workers opted for state retraining programs.

"We're right in the city and we could have used some of those people," Mr. Boullis said. But with the city's unemployment rate dipping to its lowest level in years during 1987 and 1988, the company, like the city's apparel industry, has had a difficult time hiring even unskilled help. That occurred, despite an average wage of \$11 an hour, including benefits, Mr. Boullis said. Two years ago, the average pay was \$7 an hour with benefits in the shop, which is represented by the United Textile Workers of America.

Fairhaven Textile also faced a "severe shortage" of

“

We were working seven days a week. Because of the yarn problem and only being able to run half our operation, we couldn't make it profitable.

”

— Bryan L. Boullis

rayon and nylon synthetic yarns that hampered production of the lining materials it made, Mr. Boullis said. DuPont, a major manufacturer of synthetic nylon yarns, has had troubles meeting demand and the country's largest maker of rayon, Avtex Corp. of Pennsylvania, has had problems with its production line, said Karl Spilhaus, president of the Northern Textile Association in Boston.

"Basically, it comes down to demand and the problems Avtex has had with production," Mr. Spilhaus said. The only other rayon manufacturer, the North American Rayon Co. in Tennessee, is not large enough to pick up the slack created by Avtex, he said.



# 70 workers lose jobs as Madewell plans to close

By Rob Crowley  
Standard-Times business writer

NEW BEDFORD — Madewell Manufacturing Co. Inc., known for its once-popular farmer "bib" overalls and painters' pants, has dismissed about 70 union workers and will close, a union lawyer said.

"It looks, from what I understand, to be a permanent closing," said Leonard Schneider, attorney for the Amalgamated Clothing Textile Workers Union, which represents the Madewell workers. "They are just phasing out."

The company told union production workers Feb. 10 it was closing and no longer would need them, one 15-year employee said. A few employees still work at the plant in the offices and shipping/receiving department but production has halted, the former worker said.

Company President Jay Kivowitz was not in his office Wednesday and Thursday. Jack Alves, an employee reached Wednesday at the Rodney French Boulevard plant, said workers still were on the job but declined further comment.

Fifteen years ago Madewell, a manufacturer of work

clothes, was swept into the mainstream fashion market by a denim revolution. Its "bib" overalls and hip hugging, bell-bottomed jeans competed with giant Levi Strauss Co. and Lee Jeans.

But within 10 years, tastes changed and competition from abroad squeezed the market. Madewell, which the Directory of Massachusetts Manufacturers reported at one time employed 350 people, trimmed its labor force and in recent years was forced to lay off workers as product demand sagged.

The veteran employee, who asked not to be named, said Mr. Kivowitz called a morning meeting Feb. 10 and told them the company was going out of business. Later that day a representative of Cliftex Corp. attended a meeting of union workers and offered them jobs and a total of \$200 in bonuses after three months. Several have signed on, a Cliftex spokesman said.

Meanwhile, the Worker Assistance Center in the North End said it is offering help to Madewell employees who need assistance in finding jobs, particularly office workers and management people who may not be able to locate work as quickly as stitchers or pressers, said Title III Administrator Barbara Dubin.

Mr. Schneider said he is negotiating with Madewell over the closing, seeking severance pay and any unpaid back wages.

"There's really nothing exciting about it," he said. "It's a sad story. It's a shame."

Madewell's lawyer, Andrew Shabshelowitz of Fall River, said he could not talk about the company without Mr. Kivowitz's approval.

"Lawyers can't be talking about their clients unless their clients say it is OK," he said.

## Mars Stores files under Chapter 11

By Rob Crowley  
Standard-Times business writer

NEW BEDFORD — Mars Stores Inc., the troubled New Bedford-based discount chain, filed for protection from creditors under Chapter 11 of the U.S. bankruptcy code.

The filing Thursday was prompted by an involuntary bankruptcy proceeding brought against Mars by a group of creditors in February. It is the latest in a long line of financial pitfalls suffered by Mars, which operates stores in New England, including its flagship store on Riverside Avenue, New Bedford, and another on Dartmouth Street, Dartmouth.

Under Chapter 11, a company is freed from the threat of creditors' lawsuits until it develops a plan to put its finances in order.

Mars officials did not return two phone calls Friday to inquire how they plan to pay debts or make the company profitable. Mars, which posted losses of more than \$15 million in 1987 and the first three quarters of 1988, had been trying to settle its debts

outside of bankruptcy court, according to a short statement issued by the company Thursday.

But the creditors' group went after payment by filing a Chapter 7 bankruptcy-law petition against Mars on Feb. 21. The company responded 10 days later by switching the proceeding to Chapter 11.

"The company converted the proceeding to Chapter 11 after reaching agreement with its banks on funding the company's operations over the next several weeks," Mars said. "The filing of the Chapter 11 petition allows Mars an opportunity to reorganize under the protection of the bankruptcy court."

Mars reported a loss of \$6 million in the third quarter of last year, sending it into default under the covenants of its bank loan agreement. But the banks agreed to lend the company an additional \$1.5 million so it could buy merchandise for the Christmas season.

Mars, which two years ago had 31 stores in New England and New York, has shut or sold 17 stores since then, including nine Big Value Outlets it purchased several years ago.

In another cost-cutting move, the company moved its headquarters back to New Bedford last year after four years in Dighton.

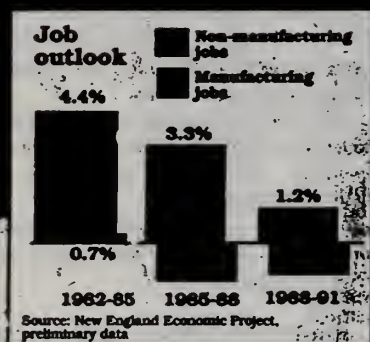
Mars Stores Inc. was born from a retailing company called Matsam, which bore the names of its founders, Matthew Tatelbaum and Samuel Katz. Its New Bedford store, the company's sixth and largest, opened on Riverside Avenue in August 1962.

Mars stores, a compendium of low-priced toys, clothes, kitchen gadgets and home items, failed to keep pace with larger competitors such as K mart and Zayre.

Last spring company President Paul Kwasnick announced plans to focus on "core" merchandise such as home furnishings and housewares rather than low-margin, competitive merchandise such as motor oil, televisions and paper products.

# How bad?

Slowing growth forces a look beyond Massachusetts' economic 'miracle'



Globe staff chart

By Charles Stein  
Globe Staff

Tax collections are down and bankruptcies are up. The welfare rolls are growing faster than the job rolls. Housing starts are falling while problem real estate loans are rising.

After years when growth ranged from the spectacular to steady, sluggish would be a better word to describe the state's economic performance today. And while some of Massachusetts' problems are the result of short-term developments, especially the slowdown in the national economy, there is a growing sense that something more profound is under way.

Put simply, the glory years of the Massachusetts miracle are over, and a new era of limits and diminished expectations has begun.

"Everyone is going to have to adjust to this - state government, real estate developers, bankers," said Frank Morris, former president of the Boston Federal Reserve Bank. A year ago Morris announced that the boom years were over and that Massachusetts was headed for a period of very modest growth. At the time it was considered an overly pessimistic forecast. Today it is more widely accepted.

The industries that carried Massachusetts during the 1980s - high technology, defense and financial services - are no longer providing the lift they once did. On a single day last week, Digital Equipment Corp. announced a salary freeze and the Bank of Boston announced a salary freeze.

OUTLOOK, Page 35





Boston: No rust bowl expected.

Globe staff photo/Yunghi Kim

## Feeling the cool-down

By Frederic M. Biddle  
Globe Staff

**W**hat's the likely impact of a slowdown in the Massachusetts economy? No one is predicting a rust belt, dust bowl, Texas oil-patch-style crash-landing. But distinctly slower growth is already with us — and is forecast to linger. Ramifications are plentiful. "You won't see a 'Help Wanted' sign in every window, for a change," says Lynn E. Browne, economist for the Federal Reserve Bank of Boston. Retail sales in the state have been flat for six months. Slumping sales tax collections are already making the state's bad budget problem worse. Even Boston Edison has

revised slightly downward its forecast of 1989 electricity consumption — due in part to a cooling economy.

A broader look at implications: ● **Employment/wages.** For years Massachusetts has been able to rely on its service economy to offset the hemorrhage of jobs from ailing manufacturing industries. Recently some economists have feared that growth in the state's service employment might slow while manufacturing jobs are still disappearing.

"Now, what we feared has happened," says Gary Cimlinero, president of the New England Economic Project. The result: experts forecast Massachusetts employment, excluding agriculture, to rise just

IMPACT, Page 36

## A 'miracle' it was

By Charles Stein  
Globe Staff

Since Gov. Dukakis' ill-fated run for president, it has become fashionable to dismiss the Massachusetts miracle as a myth, the invention of some clever public relations people working for the campaign.

It isn't so.

If the state's economy is indeed leveling off, it is happening after a remarkable upward climb. Since 1975 Massachusetts has outperformed the nation by a wide margin in the measures that count the most, personal and family income. In short, Massachusetts has grown wealthier faster than the rest of the country and it has spread the benefits of that success more broadly.

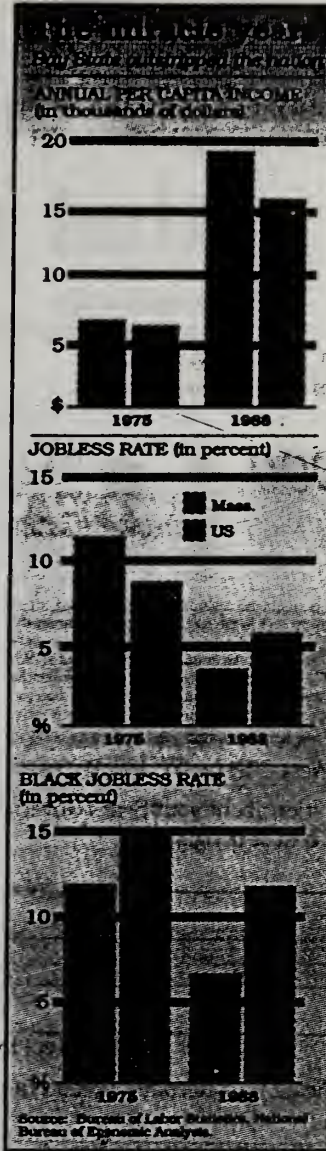
"Everyone is working and our incomes relative to the country have gone up a lot," said Frank Morris, former president of the Boston Federal Reserve Bank.

Numbers tell the story. In 1975 per capita income in Massachusetts was a scant 6 percent above the national average. "And there was a point where we were worried it would fall below the average," recalled Lynn Browne, vice president at the Boston Fed.

The fears proved groundless. By 1988 per capita income in Massachusetts was 23 percent above the national average; the numbers for family income look more or less the same.

In 1975 the jobless rate in Massachusetts was 11.2 percent, compared with a national rate of 8.5. The Massachusetts rate dropped below the country's in the late 1970s and has stayed there ever since. Last year

MIRACLE, Page 35



Globe staff chart

# Economic 'miracle' that really was

## ■ MIRACLE

Continued from Page 25

Massachusetts had an unemployment rate of 3.3 percent; the nation's was 5.5 percent.

A slow-growing population explains some of the state's success. Massachusetts did not have to produce that many new jobs to reach full employment. In fact, since 1975, the state and nation have added jobs at roughly the same rate. But that hardly tells the story of the state's dramatic transformation.

Starting in 1975 Massachusetts' high-technology industries exploded, creating thousands of jobs, many of them with good salaries. A smaller, but still significant expansion of the health sector in the late 1970s also played a role.

In the early 1980s the improvement broadened to include the defense industry, financial services, business services, like law and accounting, and finally real estate and construction.

The result was markedly better times for many people. "Tight labor markets are a great thing for most people," said Paul Harrington, a labor economist at Northeastern University.

Consider: From 1979 to 1986 roughly one out of three new jobs created in the country was a low-paying job, according to Barry Bluestone, a University of Massachusetts economist. In New England, a good proxy for Massachusetts, only one in six new jobs was low-paying — defined as a job that pays less than \$12,000 a year.

At the high end, 14 percent of the jobs created nationally in that same period were high-paying —

those with salaries of more than \$48,000. In New England, 21 percent fell into that category. "No other region looks as good as we do," said Bluestone.



AFTER THE MIRACLE: HOW BAD?

# Forced to look beyond 'miracle'

■ OUTLOOK

Continued from Page 25

and the state since the early 1980s. Compared to what we're used to, it is a pretty bleak outlook," said Gary Cimmino, chief economist at Fleet National Bank. The forecast calls for the jobless rate to stay quite low over the next year, roughly 4 percent, thanks to a work force that is barely growing. But in every other respect, the analysts paint a picture of an economy heading for stagnation.

The number of jobs, which grew at more than a 3 percent annual pace in the mid-1980s, and roughly a 2 percent pace in more recent years, is expected to climb just 1 percent a year between now and 1991. Personal income will continue to rise, but at a slower rate than in the past. Housing starts, already way off from their 1985 peak, are expected to decline still further.

The forecast anticipates that the state will continue to underperform the nation in job creation, a trend that began in the mid-1980s. And in terms of personal income growth, Massachusetts will do no better than the country as a whole, giving up a lead it has held throughout the decade.

"I think we are just going to plod along," agreed James Howell, chief economist of the Bank of America. "We're not predicting an actual downturn, but we will get as close as you can come," said Judy Hybels, an economist with Data Resources Inc. in Lexington. Thursday, the New England Economic Project, a respected group of analysts, will release its gloomiest forecast for the region.

Some of Massachusetts' woes can be laid at the feet of the national economy. The forecast for the nation looks a lot like the local one. A year-long push by the Federal Reserve Board to boost interest rates has slowed the pace of retail sales, home construction and car sales. While most analysts do not expect the economy to descend into a recession, they do look for growth to continue slowing over the next year.

The last time the national economy slumped, Massachusetts had so much momentum it barely slowed down. That won't happen this time. "We are more likely to suffer the ups and downs of the country will suffer," said Peter Kotz, chief economist at Shawmut Bank.

But Massachusetts and New England would have problems even if the national situation were better, according to Cimmino. Defense spending is likely to decline in coming years; financial services will be hard-pressed to match the performance it turned in when both the stock market and real estate market were red hot; high technology is still a young people, add in very little immigration from other states and

ture, high-tech business than

it once was. The gloom and doom needs to be kept in perspective. "Slow growth is not such a bad thing," said Bank of Boston's Howell. "A low jobless rate will mean that most people looking for a job will still be able to find one. Young people shut out of the housing market may find it easier to get back in."

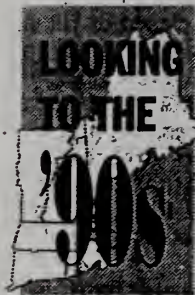
And the strain prosperity created on the roads, at the airport, even on the supply of electricity, may get some welcome relief. Massachusetts may yet learn gracefully, if not enthusiastically, But to do so, words like miracle will have to disappear from its vocabulary.

# Tough future in N.E. calls for ingenuity

First in a series of occasional articles.

By Irene Sege  
Globe Staff

If there ever was a decade when New England looked attractive, the 1980s was that decade. As other regions suffered, New England was thriving. Jobs were plentiful, unemployment was low, and wages were rising.



It seemed the perfect time for laid-off workers from the Midwest to move east. But they didn't, leaving New England to rely on its own workers to fill those new jobs, to dig deep into nontraditional pools of labor such as women and teenagers.

What New England learned in the 1980s is that, here at least, prosperity is not a very powerful magnet.

That demographic lesson defines the challenge of the 1990s, when New England will need to depend even more on the old Yankee virtue of self-reliance as two nationwide demographic trends converge earlier and harder here than in the country as a whole.

The last of the "Baby Bust" generation reaches working age next decade, and their ranks are smaller here than elsewhere. Between 1986 and 1995, the number of 15-19 year-olds in New England is expected to decline 17 percent or more than double the national drop of 6 percent.

And New England's population is relatively old. One-third are 45 or older, and by 2000 that will jump to 37 percent. The proportion of residents aged 65 and older, 13.4 percent, is one of the highest in the country. Rhode Island, with 14.7 percent, has proportionately more elderly than all but three states.

"Right now we're at the cusp," says Gary Cimlinero, chief economist with Rhode  
NEW ENGLAND, Page 14



# A tough future in N.E. calls for ingenuity

## ■ NEW ENGLAND

Continued from Page 1

Island's Fleetstar Financial Group and president of the New England Economic Project, a voluntary association of economists and others who study the region.

"We're going to experience accelerated rates of retirement. At the same time the nation and New England will be experiencing a declining number of new entrants. New England will be feeling that more so. We're definitely on the cutting edge."

Good times have stemmed the flow of people leaving the region.

Some 241,000 more people left the area in the 1970s than moved in, with all the net loss coming in the three southern New England states - Massachusetts, Rhode Island and Connecticut.

Between 1980 and 1987 the region gained a modest 86,000 people from migration, with two states posting a net loss. The Bay State lost 49,000, down from a net outflow of 263,000 in the 1970s. Connecticut had a net loss of 1,000, down from 121,000.

Ironically, the northern states that gained from migration in the 1980s did so largely at the expense of southern New England.

An estimated 90,000 more people moved to New Hampshire than left. State planners guess two-fifths came from Massachusetts. New Hampshire's overall growth rate of 19 percent makes it the fifth fastest-growing state in the

"We're going to experience accelerated rates of retirement. At the same time the nation and New England will be experiencing a declining number of new entrants. New England will be feeling that more so. We're definitely on the cutting edge."

- Gary Cimlnero, New England Economic Project

nation and the fastest east of the Mississippi River and north of Florida. In addition, much of Maine's growth, up 20,000 from migration, is in the south, with many coming from Massachusetts or southern New Hampshire.

Two years ago, David McGilvray, 39, moved from Dover, N.H., to Berwick, Maine, a town of 5,700 that has grown 37 percent since 1980. The railroad worker commutes to Boston, and he is not alone. Two of his neighbors moved recently from Massachusetts.

"I wanted to move down to Massachusetts but prices were way too high," he says. "People consider Maine the new frontier."

Why couldn't New England in its boom do what Texas did in its heyday, and draw people from moribund economies in other parts of the country?

What demographic consultant George Masnick calls the "beaten track" to New England now runs from New York, New Jersey and Pennsylvania, states whose resi-

dents vacation in New England, visit relatives here, work for companies with branches here.

"It didn't matter that jobs were growing in Massachusetts," Masnick says. "Jobs were growing in New Jersey, too."

Frederick Breimyer, vice president of the New England Economic Project, puts it simply: "Costs, climate and culture."

The cost of living here, particularly the cost of housing and energy, is too high. Winters are too cold. And the taciturn New Englander doesn't have the reputation of welcoming strangers.

"It's not a come-on-down kind of place," Breimyer says. "People who come here have to work their way in."

### Doubtful migration to increase

It is doubtful the 1990s will produce the migration to New England that the 1980s failed to trigger. The region is unlikely to maintain such a favorable economic position relative to the rest

of the country. And the East's aging population has fewer young adults, the people most likely to move to a new area.

Still, even with the economy softening as the decade ends, the ultimate constraint on New England's growth for the rest of the century may well be the quantity and quality of its labor force.

"What we have up here is us," Breimyer says. "If you can't attract from the outside, you better do well on the inside."

The trends of the 1980s give both troubling and encouraging signals for the rest of the century. New England has more families headed by a college graduate - 26 percent - than any other part of the country, yet most states in the region are losing ground on high school graduation rates.

In New Hampshire, Rhode Island and Vermont, public high school graduation rates fell between 1982 and 1987, according to US Department of Education statistics. In Massachusetts, the rate remained virtually unchanged, increasing from 76.4 percent to 76.5 percent, but the state's rank dropped from 13th to 20th. Only Connecticut and Maine showed improvement.

The region's relatively high number of college graduates does not console Rhode Island businessman Paul Choquette, chairman of the New England Council's Human Resources Committee. "Our economy in New England de-

Continued on next page



# Some N.E.

## families pay the price to thrive

Continued from preceding page

demands higher skill levels than other parts of the country," he says. "That's going to continue."

**Labor pool: women, teen-agers**

New England's appetite for new workers this decade has been fed by women and teen-agers. The region has the country's highest female participation rate in the labor force, 60 percent, and four states — New Hampshire, Vermont, Connecticut, and Rhode Island — rank in the top 10. The teen-age participation rate of 56 percent is also the highest in the nation.

However, another potential pool of new labor, minorities, is less available here than almost any other region.

Despite a growing minority population in many southern New England cities, particularly Hispanics, only 8 percent of New England's population is minority, compared to 22 percent nationwide. Virtually all the region's minorities live in Rhode Island, Connecticut and Massachusetts, but the proportion of minorities in these states is also below the national average.

Families fare better here than elsewhere in part because New Englanders, especially women, are working harder than ever. Some experts wonder if the region can expect much more from women.

"The New England miracle is partly that we spent a lot of time in the work force," says economist

Andrew Sum, director of Northeastern University's Center for Labor Market Studies. "People say I'm better off, but there's a cost. I have less time with the children. We didn't have the child we wanted. I'm not as better off as the numbers say."

The median real income of New England families rose 12 percent between 1979 and 1987, while nationwide it inched up less than 1 percent.

**Real wages have risen here**

Not only have real wages risen here, but the proportion of families with at least two workers, 62 percent, is also one of the highest in the nation. Sum and his colleagues find. The portion of family earnings contributed by a member other than the household head, 30 percent, is the highest in the country.

Among families with children, New England wives earned slightly more than single mothers in 1987, a dramatic shift from 1979 when wives brought home less than half what single mothers earned. In Massachusetts, the median real earnings of married mothers more than tripled.

Kathy Spiegelman of Cambridge knows the prosperity of the 1980s, especially for the college educated, and she knows the costs. She is 36, the mother of a 1½-year-old son, the director of planning for Harvard University, the wife of an architect.

She works, she says, partly from interest and partly because

"it would be hard to meet the mortgage and live the kind of lifestyle we want" if they relied on her husband's salary.

"I pay an emotional cost, in wanting to have enough time to do my job right and my mothering right," she says.

She works until 5:30 or 6 p.m. By the time she and her husband cook and eat and play with their son and put him to bed, it's 9 p.m. "We can keep our eyes open until maybe 10," she says. They do laundry in the early morning and shop on weekends.

"I'll tell you," Spiegelman says, "I'm interested in having more kids, and I don't know how I'll do it."

With so much of the region's prosperity due to families sending more members to work, it is not surprising that poverty rates reflect demographics as much as economics.

The increased poverty among families with children nationwide since 1979 was caused by worsening economic conditions, but in robust New England it was due to changing family structure.

Three-fourths of the region's poor families with children are headed by single mothers, up from 65 percent in 1980. Nationally, the portion has been steady at close to 60 percent.

With the number of American families headed by women continuing to rise, New England's experience serves as a warning that many single mothers need more

than a strong economy.

In Danvers, Bethany Kensington (not her real name) is about to lose her subsidized day care voucher. She is afraid she and her 4-year-old daughter will have to go back on welfare.

Kensington, a 40-year-old single mother, is a nurse's aide who works three nights a week. With her voucher, she pays \$10 a week for day care that would otherwise cost \$70.

"It's not really worth it until I can work fulltime," she says. "I don't want to do that now because she's little. She needs me and I need her."

Years ago, a joke circulated that went something like this: If the Pilgrims had landed in California, instead of Massachusetts, New England would now be a national park.

The terrain here is rough, the natural resources meager. There are few lush farmlands. No oil lies hidden underground. In the 1990s, New England must once again rely on the ingenuity of its people, on the quality, not the quantity, of its workforce.

"How many stories have you seen about labor shortages in Japan?" asks Peter Kozel, senior vice president of Shawmut Bank. "Yet their [population] growth rate is half ours. They have very rapid productivity gains."

To say the demographics aren't right is coming up with an excuse for failure. It's more excuse-making than answer."



# America is ailing at its corporate core, MIT study says

By Charles A. Radin  
Globe Staff

NEW YORK — The United States is losing its dominant position in the world because of profound defects in the country's private-sector culture, not because of unfair foreign competition or ineffective government, Massachusetts Institute of Technology researchers concluded in a two-year study released yesterday.

The researchers — 16 of MIT's most eminent en-

gineers, scientists and economists, supported by 32 other faculty members and a large staff — recommended a sweeping transformation of the way Americans make goods of all types.

In a stinging indictment of current practices, they reported American industry to be mired in long-outdated strategies, concentrating far too much on short-term gains, squandering human resources and pursuing financial gimmickery to the detriment of useful production.

A crucial underlying weakness that will make

An analysis of how the report came together and summaries of the eight production industries profiled in the study are on Page 16.

Improvements more difficult to achieve, they asserted, is the general neglect of basic education.

"US industrial performance is indeed in serious trouble," declared Michael L. Dertouzos, chairman of the study group and head of MIT's computer sciences laboratory.

He and his colleagues concluded that "wrenching changes at all levels" of the private economy will be required if the nation is to keep pace with international competition and maintain its political and military position.

They rejected the recently popular notion that America is evolving a service economy that could keep future generations prosperous even if manufacturing contributes to decline, and they found that

MIT, Page 16

16 THE BOSTON GLOBE WEDNESDAY, MAY 3, 1989

## Report's impact: Consensus that may be the last word

By David Warsh  
Globe Staff

"Made in America," the report of the MIT Commission on Industrial Productivity that was published yesterday, marks the first time that a sci-

### NEWS ANALYSIS

ence and engineering school has waded into the welter of reports by other commissions, task forces and experts competing for attention that constitutes the competitiveness debate.

What strategy did the authors at the Massachusetts Institute of Technology pursue to differentiate their product? To what sort of authority did they appeal?

For one thing, the 16 professors and 31 staff members who conducted the MIT survey over two years stuck with what they knew. They forswore a global vision of the changing world economy for a rela-

tively narrow view of the American production system. They spent no time considering the service, financial, energy or agricultural sectors of the American economy and instead studied intensively eight key industries, looking for general patterns of strength and weakness.

For another, they routinely preferred the concrete to the theoretical. Despite, or because of, the presence as commission vice chairman of Robert Solow, the Nobel laureate who 30 years ago sowed the seeds of virtually all modern productivity research, rather little attention was paid in the report to macroeconomic concerns about rates of savings and investment that have tended to dominate the debate.

Earlier reports, some associated with MIT economists, were lightly brushed aside as not going far enough in identifying American lapses; the American mal-

ady is not just overconsumption, the report suggested. It is undereducation, insufficient teamwork and inattention to detail as well.

Instead of theorizing, the commission relied on what it called a "bottom-up" approach, a series of extensively reported case studies that in turn produced a series of generalizations. The resulting \$17.95 book more clearly resembles a special issue of business magazine than a treatise. (Indeed, Fortune magazine is printing excerpts of the report in an issue going into the mail today.)

Finally, the MIT investigators read and carefully weighed all the diagnoses that had gone before, from President Reagan's Commission on Industrial Competitiveness to the National Research Council's report on manufacturing to the Cuomo Commission's report, from the

works of Robert Reich to George Glider to James Fallows to Bruce Norton.

The report repeatedly took account of a series of proposals that have emanated from the Harvard Business School over the years. An appendix by the deputy staff director, Kirkor Boudagoun, surveyed various policy recommendations presented in related studies.

An unmistakable hallmark of the MIT proceedings was their interdisciplinary and consensual nature. Computer scientists, chemists, engineers of all descriptions and management deans talked until they reached a version on which all could agree.

In the commission's words, "We worked much like a jury: we reviewed the evidence, assessed it and ultimately reached a verdict."

"The verdict is that American indus-

try indeed shows worrisome signs of weakness."

What is the fate of such reports? Well, the troupe that presented it in New York yesterday is in Washington today, testifying on Capitol Hill. And bound books are on their way to bookstores across the nation, there to sit cheek by jowl with the latest entries from trade publishers.

But the MIT report may have a significantly longer half-life than most. Not only are the school's faculty intimately involved in advising big American corporations at all levels, the scholars behind the report — the economist Solow in particular — are greatly experienced in consensus-building at the highest levels among the nation's business, labor, governmental and educational elites. The MIT report on industrial productivity may turn out to be the last word on its subject, at least for a long time to come.



# America is profoundly ill at corporate core, study says

■ MIT  
Continued from Page 1  
The federal monetary policy that has eased the US trade deficit somewhat is only concealing, not curing, more fundamental problems.

Their ominous, strongly worded report was released at a news conference at the New York Academy of Sciences.

"The corporate culture which developed over the time we were king of the mountain doesn't serve us very well now," MIT's president, Paul E. Gray, said in an interview. "That is our principal message. . . . Business had better pay attention."

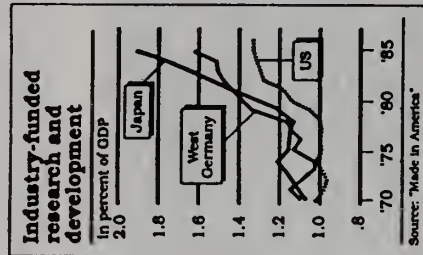
Gray called on the top echelons of industry to speak out, because money managers uninterested in productivity and business school graduates with an "i-can-manage-anything" attitude have become powerful and are deeply entrenched.

"There has to be a decision from the top that this isn't working for us," Gray said. The report called on corporate leaders to put production ahead of finance, help workers become better educated and more involved, promote greater cooperation at all levels within and between companies and look beyond American ways of operating.

The study was remarkable for its breadth and its depth as well as for its blunt wording.

Concerns ranging from workers' attitudes to corporate paternalism to federal monetary policy were fitted into a comprehensive picture. The researchers visited more than 200 companies in the United States, Europe and Japan and interviewed 550 leading industrialists, government and labor officials and analysts.

The study team, created by Gray as the MIT Commission on Industrial Productivity, was unusual in that members from the various involved academic disciplines - scientists, engineers, social scientists and economists - were asked to seek a common view of the situation. They concentrated



on detailed investigations of eight major industrial areas in which members had expertise.

"We had no preset conclusions" about the overall situation, study chairman Dertouzos said, although there was a widely held belief that the ups and downs of interest rates and international exchange rates could not be used to explain fully, or to correct, the nation's productivity problems.

"We took the results and looked for patterns," he said. The significance of the results, he said, is not that completely new causes for decline were discovered, because virtually every conceivable cause has been mentioned somewhere previously, but that "we discovered six recurring patterns that are responsible for our weakness, and they are very interrelated."

Dertouzos said neglect of kindergarten through Grade 12 education is likely the most serious national weakness contributing to sagging productivity growth.

"There are not enough words to describe the seriousness of this," he said. "It is happening at exactly the wrong time. . . . First



PAUL GRAY  
Urges change from the top

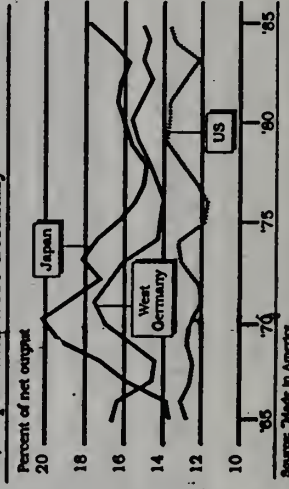
demand that to get what it is possible to get out of the new technology, you need a worker with a much broader set of skills."

Commission members said government could help significantly. In particular, they endorsed tax measures to make takeovers less profitable, to make long-term saving and investment more profitable and to encourage spending on worker training.

But they uniformly stressed that these steps are of secondary importance to the need for changes within industry.

"Tax policy can be one of the catalysts, not the catalyst," said Robert M. Solow, a Nobel laureate in economics. "The main catalyst is going to be sheer terror on the part of American industry."

Business-sector capital investment in the US, Japan and West Germany



Globe staff chart

# New failures tied to old successes

By Ronald Rosenberg  
Globe Staff

Today's weaknesses in US industrial productivity are due to outdated strategies that date back to the years after World War II, when the nation prospered by mass producing everything from cars and television sets to textiles and airplanes, according to the latest inquiry on the issue.

Although this model was once the envy of the world and has evolved in the past 40 years, it must be scrapped if the United States is to compete effectively in a globally competitive environment, according to "Made in America," a report on the nation's industrial productivity woes. It was released yesterday by the Massachusetts Institute of Technology's Commission on Industrial Productivity.

In peacetime, the nation was parochial, the report says, building for its own needs with exports as an afterthought. Over the years, labor and management worked out agreements that carefully spelled out everyone's tasks. Large volumes of goods were turned out at relatively low cost. Business, academia and government maintained respectable distances from each other except in basic research, which the government funded.

The educational system, particularly at the university level, returned to basic research, creating new technologies that over time were converted to products, the report says.

The 344-page study examines eight production industries, ranging from the older industries of steel, textiles, aircraft and automobiles to newer ones, including semiconductors, photocopiers and computers. The commission concluded

that managers and workers are so attached to the old ways of doing things that they cannot understand the new economic environment.

"Challenged by stronger foreign competition and stagnant productivity, they respond by clinging more tenaciously to the patterns of production and organization they associate with the heyday of American economic primacy," the commission concluded. "To some extent, it is the very magnitude of past successes that has prevented adaptation to a new world."

## Auto industry example

One example is the auto industry, where Japan focused on building a variety of cars catering to different markets and customer needs. By comparison, the US built many vehicles that differed only in cosmetic design. These mass-produced cars competed on price more than on design and innovation. Using new automation technologies, the Japanese built fewer cars than the Americans but increased the speed with which the new vehicles were brought to market and thus penetrated the American and world markets.

Another factor is parochialism, the report says. In the 1950s and 1960s when the nation's overseas trading partners were still weak, the United States built for itself alone and was the envy of the world, it says. The difficulties arose starting in the late 1960s, when the nation failed to respond to foreign competition.

"Many Americans pay scant attention to life beyond the nation's borders," the report states. "The educational system from kindergarten through graduate and professional schools has reinforced this inward-looking bias and has failed to open windows onto the world."



# Summaries of MIT critiques of key American industries

Below are summaries of the production industries profiled in "Made in America," the MIT Commission on Industrial Productivity Report.

## COMMERCIAL AIRCRAFT AND CHEMICALS

The chemical and commercial aircraft industries are the still the jewels of American manufacturing despite some major new European competition. Boeing Commercial Aircraft Co. and McDonnell Douglas Aircraft still build the majority of airline passenger planes flown around the world with engines from New England - Pratt & Whitney of Hartford and General Electric in Lynn.

But with deregulation, commercial aircraft makers are facing new requirements from their customers, the domestic airline industry. Purchase decisions are based more on price and credit arrangements than technology.

Despite record new orders at Boeing, the U.S. faces competition from Airbus Industrie, a consortium of aerospace firms in four European countries. In the U.S., large commercial aircraft remain the single largest net contributor to the balance of payments, providing 4.7 percent of the nation's total exports.

One reason prospects are bright for U.S. chemical makers is the transformation to a research-intensive, market-driven industry with an emphasis on product innovation. After a significant boom in the 1950s and 1960s, chemicals declined in the 1970s because of technology and increased government regulation.

The downturn led to new areas such as specialty chemicals (gasoline additives, industrial coatings and food additives), pharmaceuticals and biotechnology products, advanced materials (engineering plastics, ceramics and fiber and metal-matrix composites) and medical instruments.

The commission notes that U.S. chemical makers now can respond more quickly to market changes, have formed new links with universities and have begun managing human resources better.

## CONSUMER ELECTRONICS

Of all industries, consumer electronics is the best

# MIT critiques of key American industries

ments in plant and equipment, expanded research and development and huge product-development projects.

Only large, well-financed Japanese companies could afford to pursue this new generation of chips compared to much smaller U.S. firms.

Still, the U.S. led in innovation and chip design, an edge that enabled even smaller U.S. companies to prosper. These dynamic entrepreneurial firms - the hallmark of "Silicon Valley" - succeeded provided they had links to big companies. But that business structure may be a major cause of the weakness of the semiconductor industry.

To prosper again requires a dramatic realignment of the American semiconductor industry, the report notes. Long-term relationships with suppliers and customers must be developed, and more training of personnel is needed.

Although Japan has not gone very far in computers, it is still a powerhouse in manufacturing, where it builds a major portion of the disk drives and printers used in personal computers and a sizable fraction of the bigger devices used with large computers.

What concerns the commission is that innovative startup companies - not the major U.S. computer makers - often sell their technology for foreign competitors to imitate. At the university level U.S. schools are educating a growing cadre of Asian engineers who often return to their native land to compete against their former classmates.

In photocopiers, Xerox pioneered the field only to be met by IBM and foreign competition in the 1970s, during which its market share plummeted. But in the 1980s, Xerox regrouped and has regained its position building large central office copy machines that provide color copies.

However, such Japanese firms as Canon, Minolta, Sharp own the personal copier and the small office copy market, a thriving arena that Xerox has abandoned.

## STEEL AND TEXTILES

Despite near death in the late 1970s, the steel industry has undergone a painful restructuring that has improved its competitive position since 1982. Labor productivity and product quality have im-

proved by closing outdated and facilities, adopting new work rules and the introduction of new technology. But the big steel makers still face product quality difficulties at some plants, production efficiency issues and labor-management problems.

Just how well they continue to make improvements will determine their competitive position against both foreign firms and newer and smaller "minimills." Minimills are prospering because of new technologies such as electric-arc-furnace technology adopted during the 1970s, and some steel industry analysts optimistically predict they could produce half the steel in the U.S. by the year 2000.

Despite the upheaval in the textile and apparel industries in the past 20 years, the commission concluded that the potential exists for a revitalized, albeit restructured, domestic textile industry.

The critical factors for success are capital investment and technological innovation that can quickly reach the factory floor. But U.S. firms must also steer away from mass manufacturing and focus on finding a market niche and improving links between suppliers and customers.

## AUTOMOBILES

In the next few years auto manufacturing is expected to make a strong recovery. The central question is who will benefit: the American carmakers or the Japanese companies producing cars and trucks in North America.

The underlying cause of the U.S. automakers' declining market share was a cumbersome production organization and a market strategy that was developed in the 1920s and perfected over the next 40 years. That approach doesn't work in a highly competitive environment.

But car makers are making major strides in improving efficiency, the commission notes, thanks to Japanese carmakers who are building vehicles in Michigan, Ohio, Tennessee and California.

U.S. automakers, the commission reports, have often borrowed concepts from the Japanese to improve production. In fact, some U.S. assembly plants are now slightly more productive in their use of labor than the average Japanese plant.

- RONALD ROSENBERG











ACME  
BOOKBINDING CO., INC.

JAN 5 1992

100 CAMBRIDGE STREET  
CHARLESTOWN, MASS



